

REVISED HSR - 2021
(Effective from 18.10.2021 for the remaining part of the year)

ANALYSIS

NORTHERN PROVINCE

Ministry of Highways
Sri Lanka

HSR ANALYSIS – 2021
(Northern Province)

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ROAD DEVELOPMENT AUTHORITY - HSR. ANALYSIS (METRIC)
GENERAL NOTES

1. This **Highway Schedule of Rates (HSR.)** becomes operative from **01.01.2021**. HSR has given the maximum rates adoptable in the estimation of projects. In case, the resources are available at lesser rates depending on area and locality, the Engineer shall use such rates in the BOQ for the preparation of Estimates.
2. Basic prices of materials used to derive the rates in this schedule are considered **without the Value Added Tax (VAT)**.
3. The rates are not included with overheads and profits component. For the purpose of preparation of Engineer's Estimates, these basic rates should be added with 20% for road works and 20% for bridge works. Provisions should be made separately in the estimate for the payment of **VAT**.
4. Work has to be carried out as per **(i) Standard Specifications for Construction & Maintenance of Roads and Bridges (S.S.C.M.)**, issued by the CIDA and **(ii) Road Maintenance Manual** issued by the RDA.
5. The description of all items in the bills shall briefly conform to that in the relevant items appearing in this schedule so as to avoid any ambiguity. Control of works, control of material and measuring & paying shall be carried out as per S.S.C.M. 104 to 106.6. However, where provision for control of traffic and safety measures for the road users are not included under such items, rate shall be provided separately and paid under the relevant HSR B0-704/B0-705 or on approved S.S.RR or on closely monitored work.
6. The basic labour rates given in this schedule are inclusive of 12% E.P.F., 3% E.T.F., and the special allowances ordered by the Government.
7. **For works under Force Account, in exceptional cases, Sk'A" labour at higher rates than that given in this schedule may be engaged on adhoc basis with the DG/RDA's prior approval only. See Annex-V for net daily wages payable to labour.**
8. For items where cement and/or steel are used, the transport of same is included in the basic price. The rate of Emulsion per liter given in the HSR is exclusive of transport and shall be paid separately.
9. All cement to be used for Concrete, Structural and Masonry/Rendering work shall be of approved quality and shall conform to the specifications required by the Road Development Authority.
10. Materials from approved manufacturers only shall be used in all works (S.S.C.M. 1700). The borrow materials such as soil, aggregate and materials such as Bitumen binder etc. shall be subjected for quality assurance by sample checks during the construction as per S.S.C.M. 1602
11. **S.S.RR. and day work items** shall be approved by the Provincial Director, subject to the following conditions:
 - (a) Any **S.S.R.** where the amount of respective B.O.Q. item does not exceed Rs. **500,000/-**, irrespective of whether the S.S.R. is based on HSR, or not.
 - (b) All the **S.S.RR** and day work items, which are based on HSR, irrespective of the amount of B.O.Q. item, or as per directives issued by the Director General/R.D.A. during the year.
12. Concrete mixers should be used for mixing of all reinforced concrete or concrete specified by their Grade and in other concrete mixing exceeding 3 cu.m, unless otherwise directed. Weigh batch mixers shall be used for all concrete specified on Grade 25 and above.
13. In respect of all works involving improvements to existing roads, contractor shall control traffic as per S.S.C.M. 103.
14. Plant hire charges not included in the HSR could be obtained from RDA schedule of hire charges for Machinery & Equipment given as annex-1 or from Director/Mechanical. Otherwise procurement procedure as in General Notes Clause No. 18 should be followed. Hire charges given in this schedule are exclusive of overhead and profit component and taxes.
15. In the case of building construction works, rates in BSR-2021 prices prepared by the State Organizations on building construction, shall be adopted.
16. S.S.RR. approved with rates/prices applicable for a particular year, may be adopted for subsequent year/s where necessary, provided that only rates/prices are revised as applicable to the relevant year.

17. Materials available/recovered during execution of works:

All suitable earth, rock, steel or precast material and components available or recovered from road way excavations or demolition works shall be utilized in construction work with the approval of the Engineer and surplus disposed as directed. In the case of bridge re-construction works all bridge components such as steel girders, deck plates, and reinforcements etc., which are dismantled, shall be recovered and repaired for re-use. These items should be taken to an inventory by the Engineer and kept in stock under good care for reuse.

Separate items shall be included in the Estimates for reuse of such materials at recovery cost.

18. Procurement:

In cases where the resources have to be procured by tender procedure, the **Tender Committee shall take decisions** to make such awards according to the guide lines given in "**Procurement Manual/Procurement Guide Lines 2006 – Goods & Works**" and its subsequent amendments, issued by the **National Procurement Agency, Sri Lanka**.

a. All tender committees to procure materials for RDA work on works orders shall have a member from RDA authorized by the relevant Director/Provincial Director, and prior concurrence of the relevant Director/Provincial Director shall be obtained for the prices so decided before executing the work.

b. In case where Project Directors/ Provincial Directors procure materials at tender prices different to HSR or approve tender prices different to HSR fixed by other tender boards following government tender procedure as stated in above para, he shall take action to pay the contractor on prices approved by the tender board and amend / revise the relevant rates and the Estimates accordingly.

19. Payments under provisional sums:

"Provisional sum" means a sum included in the bill of quantities for the construction management services, execution of work, supply of goods/materials/ services or contingencies where the work items cannot be quantified accurately. The provisional sum amounts shall be included in the BOQ, by the **Engineer/Provincial Director** as per relevant assumptions on the matter and should be reasonable and justifiable respect to the site conditions and design requirements. This shall be executed in whole or in part or not at all at the direction and discretion of the Resident Engineer /Chief Engineer/Provincial Director. In case the provisional sum provided is not sufficient, funds allocated for contingencies item in the estimate shall be utilized to cover additional cost subject to the approval of the Provincial Director.

All such works, supplies, services or sub-contracts carried out by order of **Resident Engineer/Chief Engineer/Provincial Director** shall be valued at the relevant rates in the approved B.O.Q. or HSR if available. if the B.O.Q. or HSR does not contain any rates, then suitable S.S.RR or day works shall be agreed upon between Resident Engineer/Chief Engineer/Provincial Director and the contractor shall carry out work according to such approved S.S.RR.

20. Royalty/rental for materials mined:

Royalty/rental for approved borrow earth and aggregate materials mined from state land/private land shall be reimbursed **without overheads** to the contractor, on confirmation of the payment of royalty/rental by the Provincial Director of the relevant area where the mining is being executed. Royalty/rental rate shall not be more than the rate approved by the Government Agent/Divisional Secretary of the relevant area. In case the materials cannot be mined from state lands, government procurement procedure shall be followed as given in the General Notes **Clause No.18**.

21. Prior to preparation of the BOQ, suitable borrow pits shall be identified at locations as close as possible for economical transport and to the required quality, by the Resident Engineer/Chief Engineer//Provincial Director and transport distance shall be included accordingly in the BOQ and Estimates.

22. a. For any price variations other than works carried out on works orders, use the **ICTAD** formula guidelines and indices. **December 2020** shall be considered as the **base month** for computation of fluctuations. **However for contracts/work below Rs 2.0 million, payment on price variations shall not be considered.** Clause **22 b**, applies for works carried out on work orders.

b. If there is a change of ex-factory/manufacture's or ware- house price of different brands of cements, considered in the build-up of **basic price of cement** in the HSR, Director/ Provincial Director shall amend the basic price of cement after verification and pay on approved SSR. Similar procedure to be followed in case of **price changes in reinforcement steel & Bitumen**.

23. **Transport**

Note:

1. The rates for "transport" include all modes of transport up to a maximum distance of the stipulated range.
2. The most economical mode of transport shall be always adopted. In transporting materials (soil, sand, aggregate and rubble), if the average output of the transport vehicles cannot be achieved due to unavoidable delays or any other reason justifiable and acceptable to the **Chief Engineer/Provincial Director**. The rate of payment for transport shall be made under any relevant item selected from codes **T1-001 to T1-003b** irrespective of the type of vehicles to be used. However in case the quantity involved is more than 200 cu.m. per kilometer run and in situations other than stipulated in para above, the rate of payment for transport shall be selected from item codes **T1-006** or **T1-007** or **T1-007a** in the schedule whichever is relevant, For transport of plant made Premix, rate shall be as per item **T1-009**.
3. Transport of aggregate, soil, Emulsion and Premix materials **shall always be paid separately** unless otherwise directed.
4. Rate for rubble transport up to 3 km may be selected from item codes **T1-002** to **T1-003b** supported with justifiable reasons.

24. **Excavation** (S.S.C.M. 301 - 303)

Note:

1. a. **Manual rates:**

The rates given in this schedule if not otherwise stated are intended for manual excavation.

b. **Bulk rate:**

In the case of borrow earth supply where the estimated quantity **exceeds 200 cu. m** (for the whole project), the rates given under **B0-201, B0-202** or item codes **EW1-013 & EW1-014** shall be adopted. Similarly for Roadway **Excavations with quantities more than 200 cu.m.**, rates given under item codes **E1-027, E1-028 and E1-029** shall be adopted. When deviation from above rates is necessary, payment shall be made on approved S.S.RR. Based on actual site records (machine hours) or on work-studies carried out under close supervision by the Engineer, after obtaining approval of the Technical Committee.

2. The rates include for excavation and loading or depositing up to 25 meters. Transport of excavated material more than 25 meters shall always be paid separately unless otherwise directed. In case of foundation excavation for structures, backfilling and compaction to be considered separately unless otherwise specified
3. Additional excavation required for working space shall be decided by the Engineer and shall be paid at the same rate applicable to the item.
4. Soils are generally classified as in the Standard Specifications. (S.S.C.M. 301.2)
5. Construction of cofferdams that are necessary shall be paid separately. (S.S.C.M. 302(6)). Rates under items **ST1-018, ST1-019 & ST1-020 are not applicable for bridge construction work**. For bridge works, it shall be payable on S.S.RR based on closely monitored work-studies or on day works at HSR/machine hours, depending on the site conditions.
6. De-watering necessary for cofferdams shall be paid separately. (S.S.C.M. 302(6)).
7. Rates under items **E1-011 to E1-019** are not applicable for the excavation for **foundations of bridge structures**. Payment for such excavations shall be made on approved S.S.RR based on closely monitored work-studies or on day works at HSR/machine hours, depending on the site conditions.
8. Trench excavation for utility services and reinstatement shall be according to S.S.C.M. 305 and shall be read in conjunction with the procedures to be followed by agencies when trenching highways. Under no circumstances pedestrians and traffic using the road shall be allowed to suffer or inconvenienced due to trenching work, adequate notice have to be given to the public and necessary safety precautions have to be taken in advance.

25. **Aggregate/rubble (including loading & piling)**

Note:

1. Except where otherwise stated, the rates include preparing depots, loading and piling.
2. The rates for items B0-302 to B0-313 include the cost of blasting materials.
3. In exceptional cases such as limestone, "dug out" aggregate, special rates for items B0-302 to B0-313 shall be approved by the Provincial Director.

4. Transport of aggregate and rubble not included in the rates shall be paid separately.
5. Blasting operations shall be carried out as recommended in S.S.C.M. 306 and all works in blasting operations shall conform to the guidelines given in the National Environmental Act No. 47 of 1980 and any subsequent amendments.
6. Prior approval shall be obtained from the Provincial Director for the use of 19 mm hand broken aggregate.

26. Earth filling & compaction (S.S.C.M. 304, 400 & 600)

Note:

1. Approved soil that is piled shall be spread, watered and well compacted by rolling as per Standard Specifications.
2. The rates for earth compaction include the cost of watering.
3. In the case of force account works, where the royalty or similar payments has to be paid for gravel, earth, clay, turf, etc., a claim shall be prepared separately for approval of the Provincial Director, subject to the conditions given under the **Clause 20 of the General Notes**. In case of works awarded on tender rates, the royalty is deemed to be included into the rates.
4. Rates given for the items EW1-003, EW1-004, EW1-005, EW1-006, EW1-007, EW1-008 and EW1-009 on loose volume are for the work where the % density is not specified. If the rates are to be decided on compacted volume basis, the rate for loose volume shall be adjusted by multiplying the specified factor corresponding to the required % density by the factor given in table below.

% Density	Factor
1. For standard density not less than 95 %	1.35
2. For standard density not less than 100 %	1.42

For rates on other densities, S.S.R.R. should be approved by the Provincial Director.

5. Transport of water beyond 25 Meters shall be paid separately.
6. (i) The normal output of earth compaction per day will be 66 Cubic Meters using 8-10 ton Road Roller.
(ii) For earthworks in widening of existing roads where the average width is less than 1.5 meters, the output of earth compaction using 8-10 ton Roller shall be considered as 50 Cubic Meters per day.
7. Use of small compaction equipment shall be allowed only if the space is restricted for operating 10-ton Road Rollers or equivalent.

27. Rubble paving (rip rap protection - S.S.C.M. 804)

1. P1-001 to P1-004 does not include the cost of rubble, which shall be paid for separately. The coverage rates of paving are as follows:
 - (i) For pitch paving 225 mm thick 0.26 cu.m. of rubble per square Meter.
 - (ii) For pitch paving 150 mm thick 0.17 cu.m. of rubble per square Meter.
 - (iii) For flat paving 225 mm thick 0.21 cu.m. rubble per square Meter.
 - (iv) For flat paving 150 mm thick 0.15 cu.m. rubble for square Meter.
2. Rubble/rip rap paving shall be carried out to avoid damages by watercourses, slips, and slides to road embankments. Action shall be taken to include this item to routine/periodic maintenance flood damage items.

28. Aggregate Compaction (S.S.C.M. 403 - 408)

1. The normal coverage areas shall be as follows:
 - (i) For paved roads scarified for full width and for strip metaling 14.5 to 19.7 sq.m. shall be compacted with 1 cu.m. of new 50 mm aggregate.
 - (ii) For construction of new bases and for edge correction 100 sq.m. shall be compacted with 8.5 - 10.0 cu.m. of new 50 mm aggregate spread in two layers to 100 mm loose thickness.
2. Edge correction shall be 0.6 m (approx.) in width and edge strengthening shall be 1.2 m (approx.) in width, using 100, 50 & 19 mm aggregate conforming to S.S.C.M. 1103.
3. Strip metaling shall be considered only when the surface sections to be metaled are in narrow strips less than 1.2 m in width.
4. For construction of new bases, where aggregate compaction of the 19-mm and 50 mm is required 1.0 cu.m. of 19 mm aggregate is adequate for compacting with 10 cu.m. of 50 mm.
5. The normal quantities of aggregate that shall be compacted per day are as follows:
 - (i) For full width of paved road including scarifying and/or hand picking the surface will be, 12.75 cu.m. of new aggregate per day.
 - (ii) For construction of new bases, 23.5 cu.m. of new aggregate per day.
 - (iii) For strip or edge correction including loading scarifying and/or handpicking the surface, 9.90 cu.m per day.
6. The average rate of travelling of Oil/Diesel Roller is 20 km per day.
7. The rates for items M1-001, M1-004 & M1-007 to M1-013 include the necessary re-transport of aggregate and no further re-transport costs shall be paid.
8. The actual scarified area (which is not necessarily the Bitumen surfaced area) shall be paid for in items M1-002 & M1-003. Normally 0.3 m width (approx.) shall be reckoned as requiring scarifying for edge correction.
9. Tempering and sharpening of scarifier tines are included in the rates for item M1-003 and shall not be paid for separately.
10. The rates for aggregate compaction include the cost of watering.
11. Transport of water beyond 25 Meters shall be paid separately.

29. Road surface treatment (S.S.C.M. 501 - 507)

1. The various Grades of Bitumen generally used for road works shall be as stipulated in the standard specifications.
2. The rates for Bitumen in surfacing include cost of Bitumen firewood/fuel and blinding materials. Transport of blinding materials exceeding 16 km shall be paid for separately. One cu.m. of blinding material is allowable for 125 sq.m. of Bitumen surfacing.
3. The rates include the cost of internal transport of Bitumen up to 16 km from contractors yard.
4. Approved sand shall be used for blinding.
5. The aggregate quantities and binder required per sq. Meter of **D.B.S.T** or **S.B.S.T** work shall be as per the **tables 505-1 or 505-3 of the S.S.C.M.** depending on the method adopted. The application rates specified shall always be included in the description of the BOQ item for **D.B.S.T** or **S.B.S.T**.
6. In case of force account works, the Officer in-Charge shall study the average consumption per sq.m. obtained by dividing the actual quantity of Bitumen used, in liters, by the area treated in sq.m. for first/subsequent coat Bitumen surfacing. The Engineer approving the item shall, after satisfying himself that the quantities claimed are reasonable and within the limits specified in the HSR, approve the quantities accounted for. If the quantities are outside the specified limits, the approval of the Provincial Director should be obtained.

7. Cost of Binder and cover aggregate for seal coat treatment work shall be paid separately **only if specified**.
8. The basic rates for the Asphalt Concrete items **B0-361A, B0-362 and B0-362A** have been worked out taking 60/70 Penetration grade bitumen as the binder. For item **B0-365**, it is worked out with Cut-Back of 60/70 penetration grade Bitumen and for item **B0-366**, it is Bitumen Emulsion CSS-1. % Binder content used for different types of Asphalt Concrete is based on generally accepted mix designs specific to the plant location recommended by the R&D division of the RDA.

Different Bitumen penetration grades and or different binder contents may be specified for the asphalt concrete mixes for special cases. Then approved binder Type and the content as a % shall be included in the description of the item in such variations.

9. (i) **Densities of Asphalt Premix in compacted state** for general estimation purposes shall be as follows.
 - a. **Wearing Course 2.450 m.t. per cu.m.**
 - b. **Binder Course 2.430 m.t. per cu.m.**

For actual payments, design densities shall be adopted.

(ii) Average density of Asphalt Premix in loose state shall be assumed as **1.48 m.ton per cu.m.**

10. The quantity of aggregate necessary for the production of 1 metric ton of Asphalt Premix (average for all six types considered in the HSR) by plant shall be taken as **0.6270 cubic meters**.
11. The transport of aggregate for the production of Premix shall be paid separately and shall be decided according to the location of the mixing plant.
12. The transport of Emulsion CSS-1 for the production of cold mix by plant shall be added to the rate per metric ton and shall be decided according to the location of the mixing plant. 59.17 liters of Emulsion CSS-1 are required for each metric ton of cold mix.

30. Road surface maintenance (S.S.C.M. 1100 - 1102)

1. Where method of patching per half a kilometer is adopted, the quantity of Bitumen per half a kilometer per month approved in the routine Maintenance Estimates, may be increased or decreased when necessary. But the rate payable to the contractor for the monthly maintenance of the road surface per half kilometer shall be the rate approved for that half kilometer by the Chief Engineer at the commencement of the Financial Year. The actual rate payable for patching with Bitumen will be according to the appropriate items.
2. All roads/sections of roads in the district for which 14, 21, 28, etc. liters per half kilometer per month have been approved shall be listed under groups 1,2, 3, etc., respectively in a schedule of roads, which will be approved by Chief Engineer, and shall become an attachment of the HSR after **Section xiv**.
3. If during the course of the year, there is considerable variation between the estimated quantity of Bitumen per half a kilometer per month and quantity actually used in respect of any road or section of road, the Executive Engineer will examine the reasons therefore and seek the Chief Engineer's approval to amend the rate payable for Bitumen patching of that road or section of road during the same and/or subsequent Financial Year and amend the schedule referred to in **General Note 30 Item 2.**, above.
4. The prior approval of the Chief Engineer should be obtained for extensive patching. Where extensive patching is carried out, no payment should be made for normal patching on the same half kilometer in the same month.

31. Patch sealing : (S.S.C.M. 1104)

Where the road surface shows signs of deficiency of Bitumen and pitted with numerous potholes, patch sealing shall be adopted.

32. Road side and drainage systems (S.S.C.M. 701 - 707, 1302)

1. The rates exclude the cost of loading, unloading and transporting but include spreading suitably in the vicinity unless otherwise directed.
2. Culvert inlets and outlets should be cleaned before and after the rains.
3. For cleaning choked culverts (item DR1-012) with head room/diameter less than 1 meter, day works rates shall be adopted.
4. Drains should be cleared before commencing any types of surfacing (S.S.C.M. 501 - 507).

33. Bridges, culverts, retaining walls, etc. (S.S.C.M. 1001 - 1010)

Note:

1. Concrete work

- i. The cost of shuttering is not included in the rates, and shall be paid separately.
 - ii. The cost of hire charge for concrete mixer is included in the rates for concrete 'using mixers'.
 - iii. Construction of necessary cofferdams, shoring, forming islands and de-watering shall be paid separately.
 - iv. For all concrete with 19mm aggregate, crusher plant materials shall be used unless otherwise directed.
2. Only sand of approved quality shall be used for cement mixes, mortars & concretes.
 3. The rates include the cost of transport up to 25 meters on level ground in the relevant items. Any vertical transport required in excess of first 1.5 meters upwards or down wards shall be separately considered.
 4. Transport of water beyond 25 meters shall be paid separately.
 5. Extra payment for scaffolding/staging where necessary is allowable if not included in the rate.
 6. To obtain the nominal mix of cement concrete 1:2:4 (19mm); batching of materials in the field under average conditions will be in the proportions 1:2 1/2:4 by volume. Cement concrete 1:3:6 (37.5 mm) and cement concrete 1:4:8 (50mm) may continue to be batched by volume in the specified nominal proportions; cement should be by bags of 50 kg. and bags shall be deemed to be 0.035 cu. m. in volume.
 7. The quantities of the various materials for cement concrete and cement mortars required to yield an average workable mix shall be as follows.

Description	Proportion [nominal mix] or Grade	Yield Unit	Cement in 50 kg	Sand (cu.m)	Aggregate /rubble (cu.m)
1. Cement concrete	g 40(19 mm)	cu.m	9.87*	0.6*	0.91*
2. Cement concrete	g 30(19 mm)	cu.m	8.17*	0.6*	0.90*
3. Cement concrete	g 25(19 mm)	cu.m	6.35*	0.6*	0.90*
4. Cement concrete	g 25(37.5mm+19mm) 70% 30%	cu.m	5.86*	0.6*	37.5=0.54* 19.0=0.24*
5. Cement concrete	g 20(19 mm)	cu.m	6.04*	0.53*	0.79*
6. Cement concrete	1:1 1/2 :3(19 mm)	cu.m	8.12	0.60	0.91
7. Cement concrete	1:2:4 (19 mm)	cu.m	5.65	0.60	0.90
8. Cement concrete	1:2:4 (37.5 mm)	cu.m	5.65	0.60	1.00
9. Cement concrete	1:3:6 (19 mm)	cu.m	4.38	0.60	0.91
10. Cement concrete	1:3:6(37.5 mm)	cu.m	4.38	0.60	1.00
11. Cement concrete	1:4:8(50 mm)	cu.m	3.18	0.60	1.00
12. 12.5mm Cement render	1:2 mix	sq.m	0.15#	0.013	-
13. 19.0mm Cement render	1:2 mix	sq.m	0.23#	0.020	-
14. 12.5mm Cement render	1:3 mix	sq.m	0.12#	0.016	-
15. 19.0mm Cement render	1:3 mix	sq.m	0.19#	0.024	-
16. Random Rubble masonry in cement/sand mortar	1:6 mix	cu.m	1.77	0.40	1.10

In items 12 - 15 the cement quantity is exclusive of that required for smoothing where necessary.

* The above mix proportions for Grade concrete are given for estimation purposes. The actual proportions for Grade concrete shall be decided by mix designs at site and the rates shall be adjusted with the approval of the Provincial Director.

8. Ready mixed concrete:

Ready mix concrete shall be used only on the written approval of the Director/Provincial Director and for the procurement of the material government tender procedure as given under **General Notes Clause No. 18** to be followed. The contractor for ready mix concrete shall be a copious supplier having minimum of one year experience of supplying ready mix concrete to projects acceptable to the tender board and shall have sufficient transport & pumping facilities, laboratory facilities for quality control and a qualified staff.

9. Wedge stones shall mean stones that are wedged and squared on one face and roughly dressed on the other five faces to enable them to be laid in courses.

10. Wearing surface for R.C.C/P.C.C decking (S.S.C.M. 1403)

Generally for 74.5 sq.m. of **50 mm. thick compacted wearing surface**, the quantities of material required will be 3.5 cu.m. 19 mm to 3.2 mm. Graded aggregate, 2.3 cu.m. sand and 381 liters Bitumen and 91 liters of kerosene. If Emulsion is used, the quantity of material required is 500 liters of Emulsion and 273 liters of water.

11. Concrete pipe culverts (S.S.C.M. 1403)

- i. The diameter of pipes indicated refers to the internal diameter.
- ii. The rates include the cost of pipe, collars, rolling up to a distance of 25 m & lowering to bed up to 1.8 Meter depth, aligning and fixing.
- iii. Excavation and backfilling of trench is not included in the rates unless otherwise mentioned.

34. Labour, plant and materials

1. All labour, plant, equipment and materials have to be provided by the contractor.
2. **The Engineer should maintain performance records of all types of machinery for future reference.**

35. Day works

1. **Day works shall be defined and adopted by the Engineer under exceptional circumstances.**
2. Labour rates fixed under **section xiv of the HSR (Surveying, Leveling and Day works)** shall be used in pricing day works. **In cases of very special labour**, such as skin divers etc., procurement of same shall be as per **General Notes clause 18**.
3. Rate for materials in day works shall be the **purchase price subject to the condition that procurement of same is done as per General Notes Clause No.18**.
4. It is necessary that **appropriate plant is used and works are programmed to minimize the costs to the satisfaction of the Engineer.**

36. Maintenance of road signs and markings: (S.S.C.M. 1501-1502)

All traffic signs, kerbs , parapets, guardrails, barricading and k.m. posts should be painted at least once a year unless otherwise directed by the Engineer.

37. Quality control work: (S.S.C.M. 1600)

- a. **The Engineer is responsible for carrying out tests on all works before recommending for payments and maintenance of records. In case of dispute, it may be referred to Provincial Director. /Director (R & D) for a final decision. (S.S.C.M. 1602)**
- b. **Special attention should be made to control the alignment, thickness and surface regularities of pavement layers as per section 1601 of the S.S.C.M. using geodetic levels, camber boards and 3-Meter straight edges.**

38. Piece rates and allowances:

The amounts allowed for the items under "piece rates and allowances" are the anticipated basic costs to cover the expenses to be incurred, during the execution of the work.

39. Labour Inputs

The labour inputs shown against the work items in this schedule do not include the Plant and Equipment Operator costs which are deemed to have been covered under the hire charges of the Plant and Equipment.

40. HSR Analysis is for internal use only. It cannot be produced in Court of Law as reference/authority and thus is a privilege document.

HSR - 2021
Engineering Division
Ministry of Highways

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Engineering Division
Ministry of Highways

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2021
NORTHERN PROVINCE

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
LABOUR RATES (BASIC)			
B0-001	SKILLED A - (SK 'A') * (Welders, Electricians, Carpenters, Masons, Miners, Painters. Hvy/Mach Operators, Ch.Hand)	DAY (8 HRS)	1,900.00
B0-002	SKILLED B - (SK 'B')	DAY (8 HRS)	1,700.00
B0-003	SEMI SKILLED - (S/SK)	DAY (8 HRS)	1,600.00
B0-004	UNSKILLED - (U/SK)	DAY (8 HRS)	1,527.34

* **Note:** For works under Force Account **in exceptional cases, Sk'A' labour** at higher rates than above may be engaged on **adhoc basis** with **DG/RDA's prior approval**. See General Notes **Section 6**.

HIRE CHARGES (WET LEASE BASIS - INCLUDING OPERATOR UNLESS OTHERWISE))

B0-101	TAR BOILER(HEATING WITH FIREWOOD)(Less Operator)#	DAY (8 HRS)	100.00
B0-102	CONCRETE / ASPHALT MIXER (400 LTRS)	DAY (8 HRS)	7,356.32
B0-103	BITUMEN SPRAYER (Less Operator)#	DAY (8 HRS)	110.00
B0-104	WATER TANK + 50 MM. PUMP(Less Operator) #	DAY (8 HRS)	1,272.04
B0-105	WELDING PLANT ENGIN DRIVEN: WITH WELDER	DAY (8 HRS)	15,157.73
B0-106	PORKER VIBRATER (Less Operator)	DAY (8 HRS)	2,318.71
B0-107	PLATE COMPACTOR (90 KG)(Less Operator)	DAY (8 HRS)	4,397.44
B0-108	VIBRATING RAMMER (60 KG)(Less Operator)	DAY (8 HRS)	3,999.94
B0-109	VIBRATING ROLLER (1/2 - 1 Ton)	DAY (8 HRS)	7,016.73
B0-110	VIBRATING ROLLER (SMOOTH-10 TONS)	DAY (8 HRS)	33,843.83
B0-111	SMOOTH/ROAD ROLLER (8 -10 TONS:STATIC)	DAY (8 HRS)	12,635.84
B0-112	PNEUMATIC ROAD ROLLER (8 - 10 TONS)	HOUR	4,742.29
B0-113	MOTOR GRADER (65 HP)	DAY (8 HRS)	26,193.73
B0-114	MOTOR GRADER (120 -140 HP)	DAY (8 HRS)	43,828.83
B0-115	BACKHOE LOADER (JCB)	DAY (8 HRS)	25,006.78
B0-116	WHEEL LOADER (1.4 CU,M)	DAY (8 HRS)	25,408.52
B0-116A	WHEEL LOADER (1.7 CU,M)	DAY (8 HRS)	31,052.03
B0-117	TRACTOR & TRAILOR (3T)	DAY(8 HRS)	6,432.98
B0-118	MATERIAL TRANSPORT BY LORRY/TIPPER/DT (EXCEEDING 10 KM DISTANCES).	KM/CU.M.	26.96
B0-118A	-Do- BY HIRED LORRY/TIPPER/DT (EXCEEDING 10 KM DISTANCES).	KM/CU.M.	25.19
B0-119	-Do- BY LORRY/TIPPER/DT ((FOR MORE THAN 3 KM LESS THAN 10 KM. DISTANCES)	KM/CU.M.	30.53
B0-119A	-Do- BY HIRED LORRY/TIPPER/DT (FOR MORE THAN 3 KM LESS THAN 10 KM. DISTANCES)	KM/CU.M.	28.63
B0-120	TRANSPORT OF PREMIX BY DUMP TRUCK	KM/M.TONNE	19.42
B0-120A	-Do- EMULSION PER 100 LITERS PER 1 KM	KM/100 LTRS	3.79
B0-120B	-Do- PREMIX BY HIRED DUMP TRUCK	KM/M.TONNE	18.18
B0-121	SAND/CHIP SPREADER - PROPELLED	DAY (8 HRS)	39,002.17
B0-121A	SAND/CHIP SPREADER - TOWED	DAY (8 HRS)	2,536.44
B0-122	FARM TRACTOR & BROOM	DAY (8 HRS)	11,791.38
B0-123	EMULSION SPRAYER SELF PROP. (4000 LITRES)	DAY (8 HRS)	26,739.12
B0-124	WHEEL LOADER (2.7 - 3.1 CU.M)	DAY (8 HRS)	40,785.09
B0-124A	WHEEL LOADER (2.0 - 2.3 CU.M)	DAY (8 HRS)	36,399.61
B0-125	LORRY 3 TON(2.5 CU.M) *	KM	44.28
B0-126	LORRY 5 TON(3.5 CU.M) *	KM	55.53
B0-127	LORRY 7 TON(4.5 CU.M) *	KM	64.34
B0-128	WATER BOWSER (6000 LITRES)	DAY (8 HRS)	10,400.00
B0-129	ASPHALT PAVER (Crawler)	HOUR	7,903.97
B0-129A	ASPHALT PAVER (Wheel)	HOUR	8,692.41
B0-130	TANKER ONLY(20,000 LITRES)	HOUR	322.28
B0-130A	LOW BED TRAILER 30 TONS *	KM	59.97
B0-131	PRIME MOVER OLD (FOR 20,000 L TANKER)	HOUR	3,846.95
B0-131A	PRIME MOVER NEW (FOR 30 T TRAILER) TIME BASIS	HOUR	6,174.88
B0-131B	PRIME MOVER NEW (FOR 30 TON TRAILER) DISTANCE BASIS *	KM	280.68
B0-132	BABY DUMPER ,75 cu.m (less Operator)	HOUR	1,287.13
B0-133	WATER PUMP 4"	HOUR	1,191.58
B0-133A	WATER PUMP 2" (less Operator)	HOUR	274.01
B0-134	SLUDGE PUMP 4"	HOUR	1,600.56
B0-135	VIBRATING ROLLER (6 -7 TONS) TANDEM	HOUR	2,691.30
B0-136	CONCRETE MIXER WITH LOAD CELL WEIGH BATCHER 14/10	DAY (8 HRS)	12,341.34
B0-137	TROLLEY EMULSION (less Operator)	HOUR	115.05
B0-138	SPRAYER EMULSION HAND CART	HOUR	912.94
B0-139	ROAD MARKER HAND CART GAS HEATER	HOUR	1,700.00
B0-140	BITUMEN DISTRIBUTOR 750 LITRES	HOUR	1,701.31
B0-141	TANK TRUCK BITUMEN 10000 LTR	HOUR	4,582.45
B0-142	CRUSHER STONE 40T/H	HOUR	11,785.28
B0-143	TRACK DRILL CRAWLER	HOUR	1,847.13
B0-144	COMPRESSOR AIR 750 CFM	HOUR	6,872.41
B0-145	SLURRY SEALING MACHINE	HOUR	13,494.67
B0-146	MOBILE CRANE 25 TONS	HOUR	8,578.29
B0-146A	MOBILE CRANE 30 TONS	HOUR	10,870.65
B0-147	ASPHALT PLANT 60T/H HOT MIX	HOUR	17,615.07
B0-147A	COLD MIX PLANT 30 T/H	HOUR	10,513.66
B0-148	LORRY 10 TON *	KM	101.62
B0-149	PICKUP TRUCK 2WD *	KM	42.62
B0-150	FARM TRACTOR WITH WATER BOWSER	HOUR	804.45
B0-151	LORRY 17 TON SELF LOADING, WITH 10T CRANE - BOOM TRUCK (WET) *	KM	179.16

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2021
NORTHERN PROVINCE

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
HIRE CHARGES (WET LEASE BASIS - INCLUDING OPERATOR UNLESS OTHERWISE)(Continued)			
B0-152	TRACTOR WITH EMULSION BOWSER	HOUR	815.15
B0-153	EMULSION TANK TRUCK (8000 LITRES) *	KM	138.23
B0-154	DOZER(CRAWLER TRACTOR) D-4,D-41(80-100 HP)	HOUR	4,770.05
B0-155	EXCAVATOR MOBILE	HOUR	7,289.45
B0-156	AIR COMPRESSOR 250 CFM	HOUR	2,662.37
B0-157	HAND HELD BREAKER / DEMOLISHER) (Less Operator)	DAY	621.26
B0-158	ROCK DRILL HAND HELD (LESS DRILL STEEL)	HOUR	294.17
B0-159	TRUCK SNOOPER 750 KG (SKY LIFT)	HOUR	2,461.71
* Cost of return trip not considered under this rate			
SUPPLY OF SOIL FROM BORROW PITS INCLUDING LOADING.(FOR QUANTITIES MORE THAN 200 CU.M.)			
* SEE GENERAL NOTES FOR FURTHER DETAILS ON USING THIS RATE			
B0-201	APPROVED SOIL TYPE I & II FOR SUB BASES & SHOULDERS	CU.M	600.00
B0-202	APPROVED SOIL TYPE I & II FOR EMBANKMENTS	CU.M	250.00
AGGREGATE & RUBBLE (EX-QUARRY - BASIC) INCLUDING BLASTING, LOADING & PILING			
NOTE * (ROYALTY / RENTAL TO BE ADDED SEPARATELY IN THE BOQ WITHOUT ADDING OVERHEADS, IF REQUIRED TO BE REIMBURSED.)			
B0-301	(150MM - 225MM) RUBBLE - (VEHICLE MEASUREMENT, EXCLUDING PILING)	CU.M	1,700.00
B0-302	(150MM - 225MM) RUBBLE PILED	CU.M	2,097.65
MANUAL PRODUCTION			
B0-303	(100MM) AGGREGATE	CU.M	1,590.11
B0-304	(75MM) AGGREGATE	CU.M	1,413.43
B0-305	(50MM) AGGREGATE	CU.M	1,643.11
PLANT PRODUCTION			
B0-308A	(19MM) AGGREGATE	CU.M	2,900.00
B0-309	(12.5MM) AGGREGATE	CU.M	2,900.00
B0-310	(37.5MM) - DO - , (S.S.C.M. TB : 1701-1 / 1701-4)	CU.M	2,200.00
B0-311	(50MM) - DO - , (S.S.C.M. TB : 1701-4)	CU.M	2,400.00
B0-312	CRUSHER FINES (6.3MM. DOWN WARDS)	CU.M	1,700.00
B0-313	(37.5MM) GRADED (TABLE 1701,5 FOR ABC)	CU.M	2,200.00
AGGREGATE FOR SEAL COAT TREATMENTS			
(GRADING AS PER SSCM TABLE 1701-8)			
B0-314	AGGREGATE 19 MM	CU.M	2,296.82
B0-315	AGGREGATE 12.5 MM	CU.M	2,473.50
B0-316	AGGREGATE 9.5 MM	CU.M	2,473.50
SAND (RATE TO INCLUDE TRANSPORT UP TO 16 KM.) (ADDITIONAL TRANSPORT TO BE PAID SEPARATELY)			
B0-331	RIVER SAND FOR ROAD SURFACE APPLICATIONS (SSCM TABLE 1701-9)	CU.M	4,000.00
B0-332	RIVER SAND FOR CONCRETE AND MASONRY WORK (SSCM TABLE 1701-2)	CU.M	4,000.00
BRICKS (WITHOUT TRANSPORT)			
B0-340	COMMON BURNT CLAY BUILDING BRICKS (SLS 39:1978)	1000 NOS.	10,125.00

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2021
NORTHERN PROVINCE

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
BITUMEN & EMULSION			
(TRANSPORT TO BE ADDED SEPARATELY)			
B0-351	BITUMEN 80/100 *[DRUMS] (Purchases>25 drums)	LITRE	86.00
B0-351A	BITUMEN 60/70[DRUMS] (Purchases>25 drums)	LITRE	86.00
B0-352	EMULSION - C.S.S. 1* (EXCLUDING TRANSP.)	LITRE	93.35
B0-353	EMULSION - C.R.S. 1* (EXCLUDING TRANSP.)	LITRE	94.18
B0-354	EMULSION - C.R.S. 2 * (EXCLUDING TRANSP.)	LITRE	100.00
B0-355	BITUMEN 80/100 * [BULK] [with De-cant cost]	KG	88.00
B0-355A	BITUMEN 60/70 [BULK][with De-cant cost]	KG	124.00
B0-355B	BITUMEN 80/100* [BULK]	KG	89.50
B0-355C	BITUMEN 60/70 [BULK]	KG	122.00
B0-356	CUTBACK BITUMEN - MC-30	LITRE	120.00
B0-357	POLYMER MODIFIED BITUMEN (PG 76-10)	LITRE	137.52
B0-358	POLYMER MODIFIED BITUMEN EMULSION	LITRE	98.00
B0-359	SLOW SETTING EMULSION USED FOR PRIME COAT	LITRE	88.00

PREMIXED BITUMINOUS MATERIALS
(PRICE INCLUSIVE OF ALL RAW MATERIAL TRANSPORT AND ROYALTY ON AGGREGATE)

* ASPHALT COLD MIXING PLANTS ARE NOT AVAILABLE WITHIN THE PROVINCE. USE THE EX-PLANT BASIC PRICES SELECTED FROM THE TABLE GIVEN ON **PAGE 172**, RELEVANT TO THE MIXING PLANT CLOSEST TO THE SITE, DEPENDING ON THE AVAILABILITY OF THE REQUIRED TYPE AND THE MOST ECONOMICAL RATE WITH TRANSPORT.

(FOR PROJECT USE)-

B0-361A	ASPHALT CONCRETE: SURFACING MATERIAL- BINDER 60/70 BITUMEN @ 4.7% OF MIX	ITEM DELETED *
B0-362	ASPHALT/BITUMEN: BOUND BASE MATERIAL- BINDER 60/70 BITUMEN @ 3.5% OF MIX	ITEM DELETED *
B0-362A	ASPHALT CONCRETE: BINDER COURSE MATERIAL- BINDER 60/70 BITUMEN @ 4.1% OF MIX	ITEM DELETED *

(FOR PROJECTS & MAINTENANCE)-

B0-365	CUT BACK ASPHALT-AGGREGATE COLD MIX WITH 15% CUT BACK 60/70 @ 5.5% OF MIX (19 mm)	ITEM DELETED *
B0-365A	CUT BACK ASPHALT-AGGREGATE COLD MIX WITH 16% CUT BACK 60/70 @ 5.5% OF MIX (12.5 mm)	ITEM DELETED *
B0-366	EMULSIFIED ASPHALT AGGREGATE COLD MIX WITH EMULSION CSS1 @ 6.67% OF AGGREGATE	ITEM DELETED *

- NOTE: 1. ABOVE RATES INCLUDE TRANSPORT COST FOR: NIL**
2. ROYLTY ON AGGREGATE MATERIALS: NIL
3. FOR DIFFERENT PERCENTAGES OF BINDER, % CUTBACK, SEE GENERAL NOTES: SECTION 29
4. TRANSPORT COST FROM PLANT TO THE LAYING SITE TO BE PAID SEPARATELY.

READY-MIX CONCRETE (EXCLUDING HANDLING COST)

B0-380	GRADE 15 / 20 /120mm	CU.M	14,733.55
B0-381	GRADE 20 / 20 /120mm	CU.M	15,699.80
B0-382	GRADE 25 / 20 /120mm	CU.M	16,306.85
B0-383	GRADE 30 / 20 /120mm	CU.M	17,107.35
B0-384	GRADE 35 / 20 /120mm	CU.M	DELETED
B0-385	GRADE 40 / 20 /120mm	CU.M	18,982.00

- NOTE: 1. ABOVE RATES ARE CONSIDERED WITHIN 15KM FOR 120MM SLUMP AT SITE**
2. NOMINAL AGGREGATE SIZE 20MM

TIMBER & FIREWOOD (INCLUDING TRANSPORT COST)

B0-391	SAWN TIMBER CLASS 1 (LOCAL)	CU.DECL.M	138.50
B0-392	SAWN TIMBER CLASS 2 (LOCAL)	CU.DECL.M	101.20
B0-393	TIMBER ROUND JUNGLE - 100 MM (MINIMUM) TO 150 MM DIAMETER	METRE	32.00
B0-394	TIMBER ROUND JUNGLE - 150 MM (MINIMUM) TO 200 MM DIAMETER	METRE	50.00
B0-395	FIREWOOD	CU.M	1,502.65
B0-396	PLYWOOD(MR) FOR FORMWORK - 15 MM THICK	SQ.M	978.15
B0-397	BAMBOO TREE LENGTH GREATER THAN 8 METERS	NO.	377.00

CEMENT (INCLUDING TRANSPORT COST)

B0-401	PORTLAND CEMENT(FOR ALL WORK)	BAG (50.Kg)	1,016.00
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STEEL AND STEEL ITEMS
(INCLUDING TRANSPORT COST)

B0-411	MILD STEEL	KG	143.33
B0-411A	TOR STEEL	KG	225.80
B0-431	BINDING WIRE	KG	236.30
B0-432	WIRE NAILS, M.S.BOLTS & NUTS	KG	195.95
B0-433	STAINLESS STEEL 20 MM DIA.(FOR DOWELS)	METER	821.70
B0-434	GI PIPES, 50 MM DIAMETER: HEAVY DUTY TYPE	METER	1,973.30
B0-435	M.S. SHEET, 2 MM THICK	SQ.METRE	2,683.25

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2021
NORTHERN PROVINCE

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
PRECAST CONCRETE ITEMS			
EX - FACTORY: MINIMUM PRICE EXCLUDING VAT			
REINFORCED CONCRETE PIPES & COLLARS			
	DIAMETER (M.M)	LENGTH (M.M)	
	-----	-----	
PIPES			
B0-441	153 (6")	2438 (8')	01 NO. 3,800.00
B0-442	229 (9")	2438 (8')	01 NO. 6,000.00
B0-443	305 (12")	2438 (8')	01 NO. 5,950.00
B0-444	450 (1' 6")	2438 (8')	01 NO. 8,950.00
B0-445	610 (2' 0")	2438 (8')	01 NO. 13,233.35
B0-446	914 (3' 0")	1219 (4')	01 NO. 10,175.00
B0-446A	914 (3' 0")	2438 (8')	01 NO. 20,233.35
B0-447	1219 (4' 0")	1219 (4')	01 NO. 15,750.00
B0-447A	1219 (4' 0")	2438 (8')	01 NO. 30,800.00
COLLARS			
B0-441B	153 (6")		01 NO. 400.00
B0-442B	229 (9")		01 NO. 575.00
B0-443B	305 (12")		01 NO. 785.00
B0-444B	450 (1' 6")		01 NO. 1,072.50
B0-445B	610 (2' 0")		01 NO. 1,227.50
B0-446B	914 (3' 0")		01 NO. 1,620.00
B0-447B	1219 (4' 0")		01 NO. 2,400.00
PRECAST CONCRETE ITEMS			
B0-448	STD ROAD KERB 125X250X900 G25 CONCRETE		01 NO. 800.00
B0-449	PAVING SLAB 450X450X50 MM G20 WITH R/F CONCRETE		01 NO. 495.00
B0-449A	PAVING SLAB 450X450X50 MM G20 CONCRETE		01 NO. 336.65
B0-450	BRIDGE KERB 915		01 NO. 1,800.00
B0-451	STD. UPRIGHTS FOR BRIDGES (NEW DESIGN)		01 NO. 2,333.35
B0-452	STD. HAND RAILS FOR BRIDGES (NEW DESIGN)		01 NO. 2,133.35
B0-453	COUPLING PAIRS FOR HAND RAILS		01 PAIR. 633.35
B0-454	RAIN WATER CHANNELS 609 MM LONG		01 NO. 215.00
B0-455	CEMENT SAND HOLLOW BLOCK 16"X8"X4"		01 NO. 52.75
B0-456	FACIA SLAB 4' X 2'		01 NO. 3,000.00
B0-457	GUARD STONES (STANDARD)		01 NO. 3,458.35
B0-458	KILOMETER POST (STANDARD)		01 NO. 5,633.35
B0-459	BOUNDARY MARKER (STANDARD)		01 NO. 2,100.00
B0-460	G25 CONCRETE PAVING BLOCK (220mm x 110mm x 80mm)		01 NO. 38.00
B0-461	G40 CONCRETE PAVING BLOCK (220mm x 110mm x 80mm)		01 NO. 42.50
BLASTING MATERIALS (INCLUDING TRANSPORT COST)			
B0-501	BLASTING POWDER	KG.	593.50
B0-502	FUSE WIRE	M.	388.00
B0-503	STEEL, JUMPER	KG.	264.35
B0-504	ELECTRIC DETONATORS	NO.	95.90
B0-505	DYNA CORD	M.	70.30
B0-506	WATER GEL	KG.	855.80
B0-507	AMMONIUM NITRATE	KG.	190.90
B0-508	ORDINARY DETONATOR	NO.	12.00
PAINTS (INCLUDING TRANSPORT COST)			
B0-531	BITUMINOUS EMULSION PAINT(CRS-2)	LITRE	100.00
B0-534	GLUE	KG	328.00
B0-537	LIME - BOILED	KG	23.95
B0-541	PAINT-ENAMEL	LITRE	755.20
B0-542	PAINT - ANTI COROSIVE	LITRE	642.35
B0-543	DELETED		-
B0-544	PAINT - EMULSION	LITRE	754.00
B0-545	RUST REMOVER	LITRE	508.75
B0-546	EMULSION FOR EXTERIOR USE (WEATHERSHIELD)	LITRE	930.99
B0-547	ROAD MARKING PAINTS (YELLOW)	LITRE	1,027.78
B0-548	ROAD MARKING PAINTS (WHITE)	LITRE	910.59
FUEL, OILS & LUBRICANTS			
B0-601	INDUSTRIAL KEROSENE OIL (COLOMBO)	LITRE	110.00
B0-602	MOULD OIL	LITRE	43.00
B0-611	LUBRICANT(OIL)	LITRE	472.59
B0-612	AUTO DIESEL (COLOMBO)	LITRE	104.00
B0-613	PETROL (COLOMBO)	LITRE	137.00
B0-614	FURNACE OIL FOR BURNERS	LITRE	96.00
B0-615	LP GAS	KG	126.55
B0-616	LUBRICANT(GREASE))	KG	634.22

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2021
NORTHERN PROVINCE

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
MISCELLANEOUS MATERIALS			
B0-631	BASKETS (WITH TRANSPORT)	01 NO.	260.00
B0-632	GUNNY BAGS NEW(LARGE) (WITH TRANSPORT)	01 NO.	55.10
B0-632A	POLY SACS (65 KG CAPACITY) (WITH TRANSPORT)	01 NO.	41.00
B0-633	COTTON WASTE (WITH TRANSPORT)	KG	59.05
B0-634	SALT (WITH TRANSPORT)	KG	75.00
B0-635	EMPTY TAR BARRELS (140 LTRS) WITH TRANSPORT)	NO	90.55
B0-636	P.V.C. PIPE 110 MM DIA TYPE 250 PE (WITH TRANS.)	METRE	370.65
B0-636B	P.V.C. PIPE 110 MM DIA TYPE 400 PE (WITH TRANS.)	METRE	623.70
B0-637	P.V.C. PIPE 50 MM DIA TYPE 400 PE (WITH TRANS.)	METRE	195.85
B0-637A	P.V.C. PIPE 25 MM DIA TYPE 1000 PE (WITH TRANS.)	METRE	123.25
B0-637B	P.V.C. PIPE 90 MM DIA TYPE 400 PE (WITH TRANS.)	METRE	578.50
B0-637C	P.V.C. PIPE 90 MM DIA TYPE 600 PE (WITH TRANS.)	METRE	897.15
B0-637D	P.V.C. PIPE 160 MM DIA TYPE 250 PE (WITH TRANS.)	METRE	1,306.30
B0-637E	P.V.C. PIPE 160 MM DIA TYPE 400 PE (WITH TRANS.)	METRE	1,873.25
B0-637F	P.V.C. PIPE 160 MM DIA TYPE 600 PE (WITH TRANS.)	METRE	2,436.75
B0-637G	P.V.C. PIPE 160 MM DIA TYPE 1000 PE (WITH TRANS.)	METRE	3,763.70
B0-638	HARD RUBBER 12MM THICK X 75 MM WIDE (WITH TRANS)	METRE	1,331.05
B0-639	POLYTHENE 325 MM DIA GAUGE 300 (APPROX.14.0 METERS/KG) (TUBULAR FLAT WIDTH APP. 505 MM, WITH TRANS.)	KG	328.00
B0-639A	POLYTHENE 230 MM DIA GAUGE 300 (APPROX.19.5 METERS/KG) (TUBULAR FLAT WIDTH APP. 355 MM, WITH TRANS.)	KG	328.00
B0-639B	POLYTHENE 150 MM DIA GAUGE 300 (APPROX.28.0 METERS/KG) (TUBULAR FLAT WIDTH APP. 241 MM, WITH TRANS.)	KG	328.00
B0-640	ALLUMINIUM SHEET 24 SWG (WITH TRANSPORT)	SQ.METRE	1,094.50
B0-641	ANGLE IRON 50X50X6 MM (WITH TRANSPORT)	METRE	677.05
B0-642	M.S. PLATE 12 MM THICK (WITH TRANSPORT)	SQ.M	16,240.90
B0-643	ADHESIVE (WATER RESISSTANT)	KG	1,358.15
B0-644	EMULSIFIER- CSS/CRS	KG	500.00
B0-645	EARLY STRENGTH ADMIXER (Usaqe:300 ml per 50 kq Cement baq)	LTR	136.59
B0-646	TRAFFIC CONES	NO.	1,604.00
B0-647	75 MM X 8 MM DIA NUTS AND BOLTS	NO.	9.65
B0-648	SAW DUST (LOOSE)	CU.M	127.55
B0-649	DRILL STEEL	METER	113.68

PIECE RATES & ALLOWANCES

ALLOW FOR:

B0-704	BARRICADING (SMALL WORK ITEMS)	ITEM	48.20
B0-705	BARRICADING, LIGHTING, SIGNALLING ETCFOR100M (STATIONARY OPERATIONS)	DAY	1,963.65
B0-711	CEMENT, SAND & WATER FOR JOINTING HUME [PIPES 152 MM DIAMETER	JOINT	25.35
B0-712	- DO - 229 TO 610 MM DIAMETER	JOINT	105.25
B0-713	- DO - 915 MM DIAMETER	JOINT	276.10
B0-714	- DO - 1220 MM DIAMETER	JOINT	493.45
B0-715	COIR ROPE (FOR SCAFFOLDING 93 SQ.M AREA)	ITEM	68.75
B0-716	COIR STRING FOR CUTTING SIDE DRAINS (PER 2.83 CU.M)	ITEM	27.55
B0-717	- DO - FIXING SCAFFOLDING (PER 93 SQ.M)	ITEM	171.75
B0-718	MINOR REPAIRS OF PARAPETS WITH CEMENT, SAND & WATER (PER 9.29 SQ.M)	ITEM	112.25
B0-720	FUEL *(FOR LOOSENING ROAD SURFACE IN MANUAL BREAKING 50 MM DEPTH X 307 SQ.M)	ITEM	38.90
B0-723	FUEL, FORGE ETC.(PER 2.83 CU.M BLASTING)	ITEM	48.90
B0-732	LADDERS (PER 93 SQ.M)	ITEM	152.00
B0-741	PAINT (FOR LETTERING & NUMBERING ITEMS)	ITEM	123.55
B0-746	PEGS (FOR TURFING IN 19 SQ.M AREA)	ITEM	45.70
B0-751	SAND PAPER & COTT. WASTE (PER 9.29 SQ.M)	ITEM	147.05
B0-752	SHARP. SCARIFIER TYNES (FOR 307 SQ.M)	ITEM	50.15
B0-761	TIMBER PLANKS & BAMBOOS (FOR 93 SQ.M))	ITEM	1,028.40
B0-762	TIMBER POST, HORIZONTAL ETC. (FOR BARRICADING WORK IN 4 L.M.)	ITEM	411.90

WATER FOR CONCRETING:

B0-781	ALLOW FOR WATER (FOR MIXING BY MACHINE) PER	CU.M	29.60
B0-782	ALLOW FOR WATER (FOR MIXING MANUALLY) PER	CU.M	23.65

WATER FOR COMPACTION & GENERAL USE

B0-784	ALLOW FOR WATER (GRAVEL COMPACTION) PER	CU.M	17.75
B0-785	ALLOW FOR WATER (AGGREGATE COMPACTION) PER	CU.M	23.65
B0-786	ALLOW FOR WATER (MOISTENING ROAD SURFACE) PER	ITEM	71.10
B0-787	ALLOW FOR WATER SUPPLY (BY BUCKET & COIR ROPE)	ITEM	29.60
B0-788	WATER FOR GENERAL PURPOSES	LITRE	1.25

H.S.R. - SCHEDULE OF INPUTS FOR THE YEAR 2021
NORTHERN PROVINCE

<u>CODE</u>		<u>UNIT</u>	<u>PRICE(RS.)</u>
WHITE WASHING FOR BARRICADING			
B0-791	WHITE WASHING EMPTY BARRELS (BITUMEN)	01 NO.	51.05
B0-792	WHITE WASHING TIMBER POSTS, HORIZONTALS, ETC. (IN 4 L.M. BARRICADING)	01 ITEM	19.10

FOLLOWING MATERIAL PRICES ARE FOR ESTIMATION ONLY
(PAYMENTS SHOULD BE BASED ON APPROVED TENDER PRICES)

THERMOPLASTIC ROAD MARKING MATERIALS EXCLUDING TRANSPORT & VAT			
B0-800	THERMO PLASTIC ROAD MARKING MATERIAL(WHITE)	KG	148.86
B0-801	THERMO PLASTIC -DO- (YELLOW)	KG	149.02
B0-802	GLASS BEADS	KG	156.28
B0-803	CATS EYE (ALUMINIUM ROAD STUD, DOUBLE SIDED)	NO.	2,250.00
B0-804	DELETED		-
B0-805	DELETED		-
B0-806	ZEBRA BARRICADING TAPE (POLYTHENE)	METRE	38.56

P.C.C. BEAMS (Wires) EXCLUDING TRANSPORT & VAT

NOTE: Specifications of the beams should be in compliance to the national highways
RN indicates Rates are to be negotiated and decide

	BEAM LENGTH	FT.	M	WT.(Tonnes)		
B0-810	P.C.C BEAM	11'0	3.35	0.89	PER BEAM	19,500.00
B0-811	P.C.C BEAM	14'0	4.26	1.13	PER BEAM	25,500.00
B0-812	P.C.C BEAM	17'0	5.18	1.57	PER BEAM	33,500.00
B0-813	P.C.C BEAM	20'0	6.09	2.08	PER BEAM	45,000.00
B0-814	P.C.C BEAM	23'0	7.01	2.26	PER BEAM	53,000.00
B0-814A	P.C.C BEAM	27'0	8.23	2.19	PER BEAM	RN
B0-815	P.C.C BEAM	32'0	9.75	2.59	PER BEAM	RN
B0-816	P.C.C BEAM	35'0	10.67	2.86	PER BEAM	RN
B0-817	P.C.C BEAM	40'0	12.19	3.80	PER BEAM	RN
B0-818	P.C.C BEAM	44'0	13.41	4.22	PER BEAM	RN
B0-819	P.C.C BEAM	53'0	16.15	5.07	PER BEAM	RN

P.C.C. BEAMS(Strands) EXCLUDING TRANSPORT & VAT

NOTE: Specifications of the beams should be in compliance to the national highways

	BEAM LENGTH	FT.	M	WT.(Tonnes)		
B0-830	P.C.C BEAM	31.16'	9.5	2.32	PER BEAM	62,500.00
B0-831	P.C.C BEAM	37.72'	11.5	3.21	PER BEAM	86,500.00
B0-832	P.C.C BEAM	44.28'	13.5	4.20	PER BEAM	105,000.00
B0-833	P.C.C BEAM	47.56'	14.5	4.71	PER BEAM	113,500.00
B0-834	P.C.C BEAM	50.84'	15.5	5.44	PER BEAM	134,500.00
B0-835	P.C.C BEAM	54.12'	16.5	6.16	PER BEAM	143,500.00

GABION MESH EXCLUDING TRANSPORT & VAT

ZINC COATED GABION BOXES

B0-850	1X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	3,600.00
B0-851	2X1X0.5M INCLU. COATED TIE(BINDING) WIRE @ 5% OF GABION WEIGHT	PER BOX	4,500.00
B0-852	1.5X1X1M INCLU. COATED TIE (BINDING) WIRE @ 5% OF GABION WEIGHT	PER BOX	4,750.00
B0-853	2X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	6,100.00
B0-854	3X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	9,400.00

PVC COATED GABION BOXES

B0-850A	1X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	4,500.00
B0-851A	2X1X0.5M INCLU. COATED TIE(BINDING) WIRE @ 5% OF GABION WEIGHT	PER BOX	5,900.00
B0-852A	1.5X1X1M INCLU. COATED TIE (BINDING) WIRE @ 5% OF GABION WEIGHT	PER BOX	5,900.00
B0-853A	2X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	7,402.50
B0-854A	3X1X1M INCLU. COATED TIE (BINDING)WIRE @ 5% OF GABION WEIGHT	PER BOX	10,900.00

GEOTEXTILES EXCLUDING TRANSPORT & VAT

B0-860	GEOTEXTILE	PER 1 SQ.M	191.67
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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION I - TRANSPORT							
* SEE SECTION 23 OF GENERAL NOTES FOR SELECTION OF MODE OF TRANSPORT							
T1-001	TRANSPORT OF SOIL 25M TO 100M BY ANY MEANS (INCLU. LOADING AND UNLOADING): DATA FOR 4 CU.M LABOUR (U/SK) TOOLS: 2.5% OF LABOUR	1.10	DAY	B0-004	1,680.07 42.00 ----- 1,722.08 ----- 1,722.08		
	TOTAL COST FOR 4.0 CU.M				1,722.08		
	RATE PER 1 CUBIC METRE			T1-001	430.52 =====		
				SAY	430.50	420.02	10.48
T1-002	TRANSPORT 100M TO 0.5 KM BY ANY MEANS (EXCLUDING LOADING): DATA FOR 10.5 CU.M TRACTOR & TRAILOR WITH DRIVER FUEL, OIL ETC. FOR 10.5 CU.M	0.42	DAY	B0-117	2,701.85 ----- 2,701.85		
	TOTAL COST FOR 10.50 CU.M				2,701.85		
	RATE PER 1 CUBIC METRE			T1-002	257.32 =====		
				SAY	257.30	0.00	257.30
T1-003	TRANSPORT 0.5 KM TO 1.0 KM BY ANY MEANS (EXCLUDING LOADING): DATA FOR 10.5 CU.M TRACTOR & TRAILOR WITH DRIVER FUEL, OIL ETC. FOR 10.5 CU.M	0.45	DAY	B0-117	2,894.84 ----- 2,894.84		
	TOTAL COST FOR 10.5 CU.M				2,894.84		
	RATE PER 1 CUBIC METRE			T1-003	275.70 =====		
				SAY	275.70	0.00	275.70
T1-003A	TRANSPORT OF EACH SUBSEQUENT 1 KM FROM 1.0 - 8.0 KM BY ANY MEANS: (EXCLUDING LOADING) DATA FOR 10.5 CU.M TRACTOR & TRAILOR WITH DRIVER FUEL, OIL ETC. FOR 10.5 CU.M	0.07	DAY	B0-117	450.31 ----- 450.31		
	TOTAL COST FOR 10.5 CU.M				450.31		
	RATE PER 1 CUBIC METRE			T1-003A	42.89 =====		
				SAY	42.90	0.00	42.90

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-003B	TRANSPORT OF EACH SUBSEQUENT 1.0 KM BEYOND 8 KM. BY ANY MEANS: (EXCLUDING LOADING)						
	DATA FOR 10.6 CU.M						
	TRACTOR & TRAILOR WITH DRIVER FUEL, OIL ETC. FOR 10.5 CU.M	0.05	DAY	B0-117	302.35		
	TOTAL COST FOR 10.5 CU.M				302.35		
	RATE PER 1 CUBIC METRE			T1-003B	28.80		
					=====		
				SAY	28.80	0.00	28.80
	* T1-004, T1-005: CODES CHANGED AS T1-003A AND T1-003B						
T1-006	TRANSPORT OF MATERIAL IN BULK EXCLUDING LOADING (FOR DISTANCE LESS THAN OR EQUAL 3 KILO METRES):						
	DATA FOR 1.0 CU.M						
	HIRE CHARGES PER CU.M PER 3 KILO METRES	3.00	CU.M/KM	B0-119	91.59		
	TOTAL COST				91.59		
	RATE PER 1 CUBIC METRE (FIXED RATE UP TO 3 KM)			T1-006	91.59		
					=====		
				SAY	91.60	0.00	91.60
T1-007	TRANSPORT OF MATERIAL IN BULK EXCLUDING LOADING (FROM 3 KM UPTO 10 KILO METRES DISTANCE):						
	DATA FOR 1.0 CU.M						
	HIRE CHARGES PER CU.M PER KILO METRE	1.00	CU.M/KM	B0-119	30.53		
	TOTAL COST				30.53		
	RATE PER 1 CUBIC METRE PER 1 KM			T1-007	30.53		
					=====		
				SAY	30.55	0.00	30.55
T1-007A	TRANSPORT OF MATERIAL IN BULK EXCLUDING LOADING (FOR DISTANCE MORE THAN 10 KILO METRES):						
	DATA FOR 1.0 CU.M						
	HIRE CHARGES PER CU.M PER KILO METRE	1.00	CU.M/KM	B0-118	26.96		
	TOTAL COST				26.96		
	RATE PER 1 CUBIC METRE PER 1 KM			T1-007A	26.96		
					=====		
				SAY	26.95	0.00	26.95
	* T1-008: CODE AMENDED AS T1-007A						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-009	TRANSPORT OF PREMIX IN BULK, EXCLUDING LOADING OTHER THAN AT MIXING PLANT						
	DATA FOR 1.0 CU.M						
	HIRE CHARGES PER M.TON PER KILO METRE	1.00	M.TON/KM	B0-120	19.42		
	TOTAL COST				19.42		
	RATE PER 1 M.TON PER 1 KM			T1-009	19.42		
				SAY	19.40	0.00	19.40
T1-010	TRANSPORT OF BARRELS OF BITUMEN FOR FIRST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING):						
	DATA FOR 16 NOS. BARRELS						
	16 BARRELS-ASSUME 2.1 CU.M * IDLE TIME ON LABOUR DURING TRANSPORT (3 LABOURERS X.11HRS)	2.10	CU.M	T1-003	578.97		
		0.04	DAY	B0-004	62.62		
					641.59		
	COST OF TRANSPORT FOR 16 BARRELS	16	NOS.		641.59		
	RATE PER 1 BARREL			T1-010	40.10		
				SAY	40.10	3.91	36.19
T1-010A	TRANSPORT OF BARRELS OF BITUMEN FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM. (EXCLUDING LOADING AND UNLOADING):						
	DATA FOR 16 NOS. BARRELS						
	DATA FOR 16 NOS. BARRELS						
	16 BARRELS-ASSUME 2.1 CU.M * IDLE TIME ON LABOUR DURING TRANSPORT (AS ABOVE R1-006M)	2.10	CU.M	T1-003A	90.06		
		0.04	DAY	B0-004	62.62		
					152.68		
	COST OF TRANSPORT FOR 16 BARRELS	16	NOS.		152.68		
	RATE PER 1 BARREL			T1-010A	9.54		
				SAY	9.55	3.91	5.64
T1-010B	TRANSPORT OF BARRELS OF BITUMEN FOR EACH SUBSEQUENT 1.0 KM BEYOND 8 KM. (EXCLUDING LOADING AND UNLOADING):						
	DATA FOR 16 NOS. BARRELS						
	DATA FOR 16 NOS. BARRELS						
	16 BARRELS-ASSUME 2.1 CU.M * IDLE TIME ON LABOUR DURING TRANSPORT (3 LABOURERS X.08HRS)	2.10	CU.M	T1-003B	60.47		
		0.03	DAY	B0-004	45.82		
					106.29		
	COST OF TRANSPORT FOR 16 BARRELS	16	NOS.		106.29		
	RATE PER 1 BARREL			T1-010B	6.64		
				SAY	6.65	2.86	3.79
	* T1-011 & T1-012 CODE CHANGED						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-013	LOADING BARRELS OF BITUMEN INCLUSIVE OF ROLLING UPTO 25M : DATA FOR ONE NO. BARREL						
	DATA FOR 1 NO. BARRELS (190 SECONDS/BARREL)						
	LABOUR U/SK	0.01	DAY	B0-004	10.69		
	ADD. 150% FOR IDLE TIME OR FATIGUE ETC.				16.04		
					26.73		
	RATE FOR LOADING PER 1 BARREL			T1-013	26.73		
				SAY	26.75	26.75	0.00
T1-014	UNLOADING BARRELS OF BITUMEN INCLUSIVE OF ROLLING AND STACKING :						
	DATA FOR 1 NO. BARREL (100 SECONDS/BARREL)						
	LABOUR U/SK	0.00	DAY	B0-004	4.58		
	ADD.150% FOR IDLE TIME OR FATIGUE ETC.				6.87		
					11.46		
	RATE FOR UNLOADING PER 1 BARREL			T1-014	11.46		
				SAY	11.45	11.45	0.00
T1-015	TRANSPORT OF HUME PIPES 152MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 21.96 M (9 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(9 PIPES/LOAD)	2.10	CU.M	T1-003	578.97		
	9 PIPES-ASSUME 2.1 CU.M *	0.06	DAY	B0-004	84.00		
	IDLE TIME (4 LABOURERS X.11 HRS.) U/SK				662.97		
					662.97		
	COST OF TRANSPORT FOR 21.96 M				662.97		
	COST OF TRANSPORT PER 1 L.METRE			T1-015	30.19		
				SAY	30.20	3.83	26.37
T1-015A	TRANSPORT OF HUME PIPES 152MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 21.96 M (9 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(9 PIPES/LOAD)	2.10	CU.M	T1-003A	90.06		
	9 PIPES-ASSUME 2.1 CU.M *	0.06	DAY	B0-004	84.00		
	IDLE TIME AS ABOVE (T1-015) U/SK				174.07		
					174.07		
	COST OF TRANSPORT OF 21.96 M				174.07		
	COST OF TRANSPORT PER 1 L.METRE			T1-015A	7.93		
				SAY	7.95	3.83	4.12

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-015B	TRANSPORT OF HUME PIPES 152MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 21.96 M (9 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(12 PIPES/LOAD)						
	9 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	60.47		
	IDLE TIME(4 LABOURERS X 1/12 HRS)U/SK	0.04	DAY	B0-004	64.15		
					124.62		
	COST OF TRANSPORT OF 21.96 M				124.62		
	COST OF TRANSPORT PER 1 L. METRE			T1-015B	5.67		
				SAY	5.65	2.92	2.73
	* T1-016 & T1-017 CODE CHANGED						
T1-018	TRANSPORT OF HUME PIPES 229 MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 19.52 M (8 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(8 PIPES/LOAD)						
	8 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	578.97		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	84.00		
					662.97		
	COST OF TRANSPORT OF 19.52 M				662.97		
	COST OF TRANSPORT PER 1 L.METRE			T1-018	33.96		
				SAY	33.95	4.30	29.65
T1-018A	TRANSPORT OF HUME PIPES 229 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 19.52 M (8 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(8 PIPES/LOAD)						
	8 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	90.06		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	84.00		
					174.07		
	COST OF TRANSPORT OF 19.52 M				174.07		
	COST OF TRANSPORT PER 1 L.METRE			T1-018A	8.92		
				SAY	8.90	4.30	4.60

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-018B	TRANSPORT OF HUME PIPES 229 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 19.52 M (8 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(8 PIPES/LOAD) 8 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	60.47		
	IDLE TIME(4 LABOURERS X 1/12 HRS)U/SK	0.04	DAY	B0-004	64.15		
					124.62		
	COST OF TRANSPORT OF 19.52 M				124.62		
	COST OF TRANSPORT PER 1 L.METRE			T1-018B	6.38		
				SAY	6.40	3.29	3.11
	* T1-019 & T1-020 : CODE CHANGED						
T1-021	TRANSPORT OF HUME PIPES 305 MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 14.64 M (6 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(6 PIPES/LOAD) 6 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	578.97		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	84.00		
					662.97		
	COST OF TRANSPORT OF 14.64 M				662.97		
	COST OF TRANSPORT PER 1 L.METRE			T1-021	45.28		
				SAY	45.30	5.74	39.56
T1-021A	TRANSPORT OF HUME PIPES 305 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 14.64 M (6 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(6 PIPES/LOAD) 6 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	90.06		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	84.00		
					174.07		
	COST OF TRANSPORT OF 14.64 M				174.07		
	COST OF TRANSPORT PER 1 L.METRE			T1-021A	11.89		
				SAY	11.90	5.74	6.16

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-021B	TRANSPORT OF HUME PIPES 305 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 14.64 M (6 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(6 PIPES/LOAD) 6 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	60.47		
	IDLE TIME AS ABOVE (T1-017)U/SK	0.04	DAY	B0-004	64.15		
					124.62		
	COST OF TRANSPORT OF 14.64 M				124.62		
	COST OF TRANSPORT PER 1 L.METRE			T1-021B	8.51		
				SAY	8.50	4.38	4.12
	* T1-022 & T1-023: CODE CHANGED						
T1-024	TRANSPORT OF HUME PIPES 457 MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 9.76 M (4 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	578.97		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	84.00		
					662.97		
	COST OF TRANSPORT OF 9.76 M				662.97		
	COST OF TRANSPORT PER 1 L.METRE			T1-024	67.93		
				SAY	67.95	8.61	59.34
T1-024A	TRANSPORT OF HUME PIPES 457 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 9.76 M (4 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	90.06		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	84.00		
					174.07		
	COST OF TRANSPORT OF 9.76 M				174.07		
	COST OF TRANSPORT PER 1 L.METRE			T1-024A	17.83		
				SAY	17.85	8.61	9.24

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-024B	TRANSPORT OF HUME PIPES 457 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 9.76 M (4 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	60.47		
	IDLE TIME AS ABOVE (T1-017)U/SK	0.04	DAY	B0-004	64.15		
					124.62		
	COST OF TRANSPORT OF 9.76 M				124.62		
	COST OF TRANSPORT PER 1 L.METRE			T1-024B	12.77		
				SAY	12.75	6.57	6.18
	* T1-025 & T1-026: CODE CHANGED						
T1-027	TRANSPORT OF HUME PIPES 610 MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 7.32 M (3 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(3 PIPES/LOAD) 3 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	578.97		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	84.00		
					662.97		
	COST OF TRANSPORT OF 7.32 M				662.97		
	COST OF TRANSPORT PER 1 L.METRE			T1-027	90.57		
				SAY	90.55	11.48	79.07
T1-027A	TRANSPORT OF HUME PIPES 610 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 7.32 M (3 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(3 PIPES/LOAD) 3 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	90.06		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	84.00		
					174.07		
	COST OF TRANSPORT OF 7.32 M				174.07		
	COST OF TRANSPORT PER 1 L.METRE			T1-027A	23.78		
				SAY	23.80	11.48	12.32

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-027B	TRANSPORT OF HUME PIPES 610 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 7.32 M (3 PIPES OF 2.44 M EACH)						
	HIRE OF VEHICLES(3 PIPES/LOAD) 3 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	60.47		
	IDLE TIME AS ABOVE (T1-017)U/SK	0.04	DAY	B0-004	64.15		
					124.62		
	COST OF TRANSPORT OF 7.32 M				124.62		
	COST OF TRANSPORT PER 1 L.METRE			T1-027B	17.02		
				SAY	17.00	8.76	8.24
	* T1-028 & T1-029: CODE CHANGED						
T1-030	TRANSPORT OF HUME PIPES 915 MM DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 4.88 M (4 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	578.97		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	84.00		
					662.97		
	COST OF TRANSPORT OF 4.88 M				662.97		
	COST OF TRANSPORT PER 1 L.METRE			T1-030	135.85		
				SAY	135.85	17.21	118.64
T1-030A	TRANSPORT OF HUME PIPES 915 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 4.88 M (4 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	90.06		
	IDLE TIME AS ABOVE (T1-015)U/SK	0.06	DAY	B0-004	84.00		
					174.07		
	COST OF TRANSPORT OF 4.88 M				174.07		
	COST OF TRANSPORT PER 1 L.METRE			T1-030A	35.67		
				SAY	35.65	17.21	18.44

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-030B	TRANSPORT OF HUME PIPES 915 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 4.88 M (4 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(4 PIPES/LOAD) 4 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003B	60.47		
	IDLE TIME AS ABOVE (T1-017)U/SK	0.04	DAY	B0-004	64.15		
					124.62		
	COST OF TRANSPORT OF 4.88 M				124.62		
	COST OF TRANSPORT PER 1 L.METRE			T1-030B	25.54		
				SAY	25.55	13.15	12.40
	* T1-031 & T1-032: CODE CHANGED						
T1-033	TRANSPORT OF HUME PIPES 1220 MM DIA. DIA. FOR 1ST 1.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 2.44 M (2 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(2 PIPES/LOAD) 2 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003	578.97		
	IDLE TIME (4 LABOURERS X.22 HRS.)U/SK	0.11	DAY	B0-004	168.01		
					746.98		
	COST OF TRANSPORT OF 2.44 M				746.98		
	COST OF TRANSPORT PER 1 L.METRE			T1-033	306.14		
				SAY	306.15	68.86	237.29
T1-033A	TRANSPORT OF HUME PIPES 1220 MM DIA. FOR EACH SUBSEQUENT 1.0 KM, FROM 1.0 - 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 2.44 M (2 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(2 PIPES/LOAD) 2 PIPES-ASSUME 2.1 CU.M *	2.10	CU.M	T1-003A	90.06		
	IDLE TIME (4 LABOURERS X.22 HRS.)U/SK	0.11	DAY	B0-004	168.01		
					258.07		
	COST OF TRANSPORT OF 2.44 M				258.07		
	COST OF TRANSPORT PER 1 L.METRE			T1-033A	105.77		
				SAY	105.75	68.86	36.89

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-033B	TRANSPORT OF HUME PIPES 1220 MM DIA. FOR EACH SUBSEQUENT 1.0 KM BEYOND 8.0 KM OF TRANSPORT (EXCLUDING LOADING AND UNLOADING) :						
	DATA FOR 2.44 M (2 PIPES OF 1.22 M EACH)						
	HIRE OF VEHICLES(2 PIPES/LOAD)	2.10	CU.M	T1-003B	60.47		
	2 PIPES-ASSUME 2.1 CU.M *	0.08	DAY	B0-004	126.77		
	IDLE TIME (4 LABOURERS X 1/6 HRS.)U/SK				187.24		
	COST OF TRANSPORT OF 2.44 M				187.24		
	COST OF TRANSPORT PER 1 L.METRE			T1-033B	76.74		
				SAY	76.75	51.95	24.80
	* T1-034 & T1-035: CODE CHANGED						
T1-036	LOADING AND UNLOADING 152 MM DIA. 2.44 M LONG HUME PIPES :						
	DATA FOR ONE 2.44 M LONG PIPE						
	LABOUR U/SK (2 X 13 MINUTES)	0.05	DAY	B0-004	82.48		
	RATE FOR 152 MM DIA., 2.44 M LONG, 1 NO. PIPE			T1-036	82.48		
				SAY	82.50	82.50	0.00
T1-037	LOADING AND UNLOADING 229 MM DIA. 2.44 M LONG HUME PIPES :						
	DATA FOR ONE 2.44 M LONG PIPE						
	LABOUR U/SK (3 X 10 MINUTES)	0.06	DAY	B0-004	96.22		
	RATE FOR 229 MM DIA., 2.44 M LONG, 1 NO. PIPE			T1-037	96.22		
				SAY	96.20	96.20	0.00
T1-038	LOADING AND UNLOADING 305 MM DIA. 2.44 M LONG HUME PIPES :						
	DATA FOR ONE 2.44 M LONG PIPE						
	LABOUR U/SK (6 X 10 MINUTES)	0.13	DAY	B0-004	190.92		
	RATE FOR 305 MM DIA., 2.44 M LONG, 1 NO. PIPE			T1-038	190.92		
				SAY	190.90	190.90	0.00

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-039	LOADING AND UNLOADING 457 MM DIA. 2.44 M LONG HUME PIPES :						
	DATA FOR ONE 2.44 M LONG PIPE						
	LABOUR U/SK (10 X 10 MINUTES)	0.21	DAY	B0-004	317.69		
					317.69		
	RATE FOR 457 MM DIA., 2.44 M LONG, 1 NO. PIPE			T1-039	317.69		
				SAY	317.70	317.70	0.00
T1-040	LOADING AND UNLOADING 610 MM DIA. 2.44 M LONG HUME PIPES :						
	DATA FOR ONE 2.44 M LONG PIPE						
	LABOUR U/SK ((9+4) X 10 MINUTES)	0.27	DAY	B0-004	413.91		
					413.91		
	RATE FOR 610 MM DIA., 2.44 M LONG, 1 NO. PIPE			T1-040	413.91		
				SAY	413.90	413.90	0.00
T1-041	LOADING AND UNLOADING 915 MM DIA. 1.22 M LONG HUME PIPES :						
	DATA FOR TWO 1.22 M LONG PIPES						
	LABOUR U/SK (8 X 1 HOUR)	1.00	DAY	B0-004	1,527.34		
					1,527.34		
	RATE FOR 915 MM DIA., 1.22 M LONG, 1 NO. PIPE			T1-041	763.67		
				SAY	763.65	763.65	0.00
T1-042	LOADING AND UNLOADING 1220 MM DIA. 1.22 M LONG HUME PIPES :						
	DATA FOR TWO 1.22 M LONG PIPES						
	LABOUR U/SK (8 X 2 HRS.)	2.00	DAY	B0-004	3,054.68		
					3,054.68		
	RATE FOR 1220 MM DIA., 1.22 M LONG, 1 NO. PIPE			T1-042	1,527.34		
				SAY	1,527.35	1,527.35	0.00
T1-043	TRANSPORT OF PRECAST KERB STONES (ALL TYPES) FOR ROAD WORKS, INCLUDING LOADING AND UNLOADING :						
	DATA FOR 99 METRES(110 KERBS)						
	AVERAGE WEIGHT OF A KERB STONE	62.90	KG				
	NO.OF KERBS PER TRIP IN A 7 TON LORRY SAY	110.00	NOS.				
	AVERAGE TRANSPORT DISTANCE SAY	100.00	KM				
	HIRE CHARGES TWO WAY FOR LORRY	200.00	KM	B0-127	12,868.00		
	FOR LOADING & UNLOADING:						
	LABOUR U/SK (4 X 2 HOURS)	1.00	DAY	B0-004	1,527.34		
					14,395.34		
	TOTAL FOR 99 METRE LENGTH FOR 100 KM TRANSPORT				14,395.34		
	RATE FOR 1 LINEAR METRE-KILO METRE			T1-043	1.45		
				SAY	1.45	0.15	1.30

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-044	FOR BRIDGE WORKS, INCLUDING LOADING AND UNLOADING :						
	DATA FOR 68.5 METRES(75 KERBS)						
	AVERAGE WEIGHT OF A KERB STONE	91.00	KG				
	NO.OF KERBS PER TRIP IN A 7 TON LORRY (7000/91 = 76.92)	SAY 75.00	NOS.				
	AVERAGE TRANSPORT DISTANCE	100.00	KM				
	HIRE CHARGES TWO WAY FOR LORRY	200.00	KM	B0-127	12,868.00		
	FOR LOADING & UNLOADING:						
	LABOUR U/SK (6 X 2 HOURS)	1.50	DAY	B0-004	2,291.01		

					15,159.01		

	TOTAL FOR 68.5 METRE LENGTH FOR 100 KM TRANSPORT				15,159.01		

	RATE FOR 1 LINEAR METRE-KILO METRE			T1-044	2.21		
					=====		
				SAY	2.20	0.33	1.87
T1-045	TRANSPORT OF PRECAST CONCRETE HAND RAILS, UP-RIGHTS AND JOINTS FOR BRIDGE WORKS, INCLUDING LOADING AND UNLOADING :						
	DATA FOR TOTAL 38 METRES LENGTH HAND						
	RAILING (19 METRE LENGTH PER SIDE) (PER STD TYPE DRAWING-T/B/102/B) :						
	AVERAGE WEIGHT OF A HAND RAIL	47.85	KG				
	AVERAGE WEIGHT OF AN UPRIGHT	55.49	KG				
	AVER. WEIGHT OF A COLLAR JOINT HALF	3.05	KG				
	TOTAL NOS. HAND RAILS	48.00	NOS.				
	TOTAL NOS. UPRIGHTS	36.00	NOS.				
	TOTAL NOS. COLLAR JOINT HALVES	54.00	NOS.				
	TOTAL WEIGHT TO TRANSPORT	5,125.25	KG				
	AVERAGE TRANSPORT DISTANCE	100.00	KM				
	HIRE CHARGES TWO WAY FOR 5 TON LORRY	200.00	KM	B0-126	11,106.00		
	FOR LOADING & UNLOADING:						
	LABOUR U/SK (4 X 2 HOURS)	1.00	DAY	B0-004	1,527.34		

					12,633.34		

	TOTAL FOR 38 METRE LENGTH FOR 100 KM TRANSPORT				12,633.34		

	RATE FOR 1 LINEAR METRE-KILO METRE			T1-045	3.32		
					=====		
				SAY	3.30	0.40	2.90
T1-046	TRANSPORT OF PRECAST CONCRETE SLABS 450X450X50 MM FOR FOOT WALKS, INCLUDING LOADING AND UNLOADING :						
	DATA FOR 25 SQ.METERS(124 SLABS)						
	AVERAGE WEIGHT OF A SLAB	23.00	KG				
	NO.OF SLABS PER TRIP IN A 3 TON LORRY (124 X 23 KG = 2852 KG)	124.00	NOS.				
	AVERAGE TRANSPORT DISTANCE	100.00	KM				
	HIRE CHARGES TWO WAY FOR LORRY	200.00	KM	B0-125	8,856.00		
	FOR LOADING & UNLOADING:						
	LABOUR U/SK (4 X 1.5 HOURS)	0.75	DAY	B0-004	1,145.51		

					10,001.51		

	TOTAL FOR 25 SQ.METRE AREA FOR 100 KM TRANSPORT				10,001.51		

	RATE FOR 1 SQ.METRE-KILO METRE			T1-046	4.00		
					=====		
				SAY	4.00	0.46	3.54

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
T1-047	TRANSPORT OF PRECAST STANDARD BOUNDARY MARKERS INCLUDING UNLOADING ONLY * :						
	DATA FOR 70 STANDARD BOUNDARY MARKERS						
	AVERAGE WEIGHT OF A BOUND. MARKER	94.81	KG				
	NO.OF MARKERS PER TRIP IN A 7 TON LORRY (7000/95 = 73.68)	70.00	NOS.				
	AVERAGE TRANSPORT DISTANCE	100.00	KM				
	HIRE CHARGES TWO WAY FOR LORRY FOR UNLOADING ONLY:	200.00	KM	B0-127	12,868.00		
	LABOUR U/SK (6 X 1 HOUR)	0.75	DAY	B0-004	1,145.51		

					14,013.51		
	TOTAL FOR 70 MARKERS PER 100 KM TRANSPORT				-----		
					14,013.51		
	RATE FOR 1 NO PER KILO METRE			T1-047	2.00		
					=====		
				SAY	2.00	0.16	1.84
	* SUPPLY RATE INCLUDE LOADING AT YARD.						
T1-048	TRANSPORT OF EMULSION						
	DATA FOR 8000 LITERS PER 1 KM						
	HIRE CHARGE FOR TANK TRUCK EMULSION	1.00	KM	B0-153	138.23		
	LITERS OF EMULSION TRANSPORTED	8,000.00	LITERS				
	TRANSPORT COST PER 100 LITERS OF EMULSION	1.00	100LTR/KM		3.46		

	RATE FOR 100 LITERS PER KILO METRE			T1-048	3.46		
					=====		
				SAY	3.50	0.00	3.50
T1-049	TRANSPORT OF GABION MESH 4X1X1 M SIZE						
	DATA FOR 206 NOS PER 188 KM						
	AVERAGE TRANSPORT DISTANCE	188.00	KM				
	NUMBER OF MESH BOXES TO BE TRANSPORTED BY TWO LORRIES	206.00	NOS				
	LORRY 3 TONN	376.00	KM	B0-125	16,649.28		
	LORRY 5 TONN	376.00	KM	B0-126	20,879.28		
	LABOUR - U/SK FOR LOADING AND UNLOADING	0.50	DAY	B0-004	763.67		

	TRANSPORT COST FOR 206 NOS FOR 188 KM				38,292.23		
	TRANSPORT RATE FOR 1 NO. MESH PER 1 KM			T1-050	0.99		
					=====		
				SAY	1.00	0.02	0.98

* * *

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION II							
=====							
ROADWAY AND FOUNDATION / TRENCH EXCAVATION							
(INCLUDING LOADING, UNLOADING AND TRANSPORTING WITHIN 25 METERS DISTANCE UNLESS OTHERWISE SPECIFIED.)							
* NOTE: FOR ROADWAY EXCAVATIONS INVOLVING MORE THAN 200 CU.M, MACHINE RATES SHOULD BE ADOPTED							

E1-001	EXCAVATION IN LOOSE SOIL (DRY) [SSCM 301.2(IV)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	38.18 86.67		
					1,652.19		
	COST PER 2.83 CU.M				1,652.19		
	RATE PER 1 CU.M			E1-001	583.81		
				SAY	583.80	539.70	44.10
E1-002	EXCAVATION IN LOOSE SOIL (WET) IN SLIPS [SSCM 301.3(0)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.25	DAY	B0-004	1,909.18		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	47.73 86.67		
					2,043.57		
	COST PER 2.83 CU.M				2,043.57		
	RATE PER 1 CU.M			E1-002	722.11		
				SAY	722.10	674.62	47.48
E1-003	EXCAVATION IN ORDINARY SOIL (CUTTING MEASUREMENT) [SSCM 301.2(V)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.50	DAY	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	57.28 86.67		
					2,434.95		
	COST PER 2.83 CU.M				2,434.95		
	RATE PER 1 CU.M			E1-003	860.41		
				SAY	860.40	809.54	50.86

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-004	EXCAVATION IN ORDINARY SOIL (VEHICLE MEASUREMENT) [SSCM 301.2(V)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.50	DAY	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS				57.28		
	BASKETS	0.33	NO.	B0-631	86.67		
	LESS 10% OF TOTAL FOR BULKING				243.50		

					2,191.46		
	COST PER 2.83 CU.M				-----		
					2,191.46		
	RATE PER 1 CU.M			E1-004	774.37		
					=====		
				SAY	774.35	728.59	45.76
E1-005	EXCAVATION IN MEDIUM SOIL (CUTTING MEASUREMENT) [SSCM 301.2(VI)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				76.37		
	BASKETS	0.33	NO.	B0-631	86.67		

					3,217.71		
	COST PER 2.83 CU.M				-----		
					3,217.71		
	RATE PER 1 CU.M			E1-005	1,137.00		
					=====		
				SAY	1,137.00	1,079.39	57.61
E1-006	EXCAVATION IN MEDIUM SOIL (VEHICLE MEASUREMENT) [SSCM 301.2(VI)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				76.37		
	BASKETS	0.33	NO.	B0-631	86.67		
	LESS 15% OF TOTAL FOR BULKING				482.66		

					2,735.06		
	COST PER 2.83 CU.M				-----		
					2,735.06		
	RATE PER 1 CU.M			E1-006	966.45		
					=====		
				SAY	966.45	917.48	48.97
E1-007	EXCAVATION IN HARD SOIL (CUTTING MEASUREMENT) [SSCM 301.2(VII)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	3.00	DAYS	B0-004	4,582.02		
	ALLOW 2.5% ON LABOUR FOR TOOLS				114.55		
	BASKETS	0.33	NO.	B0-631	86.67		

					4,783.24		
	COST PER 2.83 CU.M				-----		
					4,783.24		
	RATE PER 1 CU.M			E1-007	1,690.19		
					=====		
				SAY	1,690.20	1,619.09	71.11

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-008	EXCAVATION IN HARD SOIL (VEHICLE MEASUREMENT) [SSCM 301.2(VII)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	3.00	DAYS	B0-004	4,582.02		
	ALLOW 2.5% ON LABOUR FOR TOOLS				114.55		
	BASKETS	0.33	NO.	B0-631	86.67		
	LESS 15% OF TOTAL FOR BULKING				717.49		

					4,065.75		

	COST PER 2.83 CU.M				4,065.75		

	RATE PER 1 CU.M			E1-008	1,436.66		
					=====		
				SAY	1,436.65	1,376.23	60.42
E1-009	EXCAVATION IN UNCLASSIFIED SOIL (CUTTING MEASUREMENT) [SSCM 301.2 a(1)] :						
	DATA FOR 1 CU.M						
	RATE @ E1-003				860.41		
	RATE @ E1-005				1,137.00		
	RATE @ E1-007				1,690.19		

	AVERAGE COST PER 1 CU. M				1,229.20		

	RATE PER 1 CU.M			E1-009	1,229.20		
					=====		
				SAY	1,229.20	1,169.34	59.86
NOTE : SEE ITEM NOS. FROM E1-027 ON PAGE 27 FOR ROADWAY EXCAVATION USING MACHINERY.							
E1-010	EXCAVATION IN SOFT ROCK (CUTTING MEASUREMENT) [SSCM 301.2(VII)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	3.25	DAYS	B0-004	4,963.86		
	ALLOW 2.5% ON LABOUR FOR TOOLS				124.10		
	BASKETS	0.33	NO.	B0-631	86.67		

					5,174.62		

	COST PER 2.83 CU.M				5,174.62		

	RATE PER 1 CU.M			E1-010	1,828.49		
					=====		
				SAY	1,828.50	1,754.01	74.49
E1-010 A	EXCAVATION IN MUD/MARSHY MATERIAL (CUTTING MEASUREMENT) [SSCM 301.2(VII)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.50	DAYS	B0-004	3,818.35		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.46		
	BASKETS	0.33	NO.	B0-631	86.67		

					4,000.48		

	COST PER 2.83 CU.M				4,000.48		

	RATE PER 1 CU.M			E1-010 A	1,413.60		
					=====		
				SAY	1,413.60	1,349.24	64.36

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-011	EXCAVATION PIT/TRENCH FOR FOUNDATION IN ORDINARY SOIL NOT EXCEEDING 1.5 M. DEEP, INCLUDING LEVELLING AND RAMMING BOTTOM, EXCAVATED MATERIAL DEPOSITED AT SITE WITH IN 25 M OR AS DIRECTED. * (SHORING, DEWATERING IF NECESSARY SHALL BE PAID SEPARATELY) [SSCM 302.1-302.3] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	76.37 86.67		
					3,217.71		
	COST PER 2.83 CU.M				3,217.71		
	RATE PER 1 CU.M			E1-011	1,137.00		
				SAY	1,137.00	1,079.39	57.61
	* SEE GENERAL NOTES 24(3) FOR DETAILS REGARDING ADDITIONAL EXCAVATION REQUIRED FOR WORKING SPACE.						
E1-012	DITTO - MEDIUM SOIL, - DO - DO - :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.50	DAYS	B0-004	3,818.35		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	95.46 86.67		
					4,000.48		
	COST PER 2.83 CU.M				4,000.48		
	RATE PER 1 CU.M			E1-012	1,413.60		
				SAY	1,413.60	1,349.24	64.36
E1-013	DITTO - HARD SOIL, - DO - DO - :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	3.50	DAYS	B0-004	5,345.69		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	133.64 86.67		
					5,566.00		
	COST PER 2.83 CU.M				5,566.00		
	RATE PER 1 CU.M			E1-013	1,966.78		
				SAY	1,966.80	1,888.94	77.86
E1-014	DITTO - IN UNCLASSIFIED SOIL, - DO - DO - :						
	DATA FOR 1 CU.M						
	RATE @ E1-011M				1,137.00		
	RATE @ E1-012M				1,413.60		
	RATE @ E1-013M				1,966.78		
	AVERAGE COST PER 1 CU. M				1,505.79		
	RATE PER 1 CU.M			E1-014	1,505.79		
				SAY	1,505.80	1,439.19	66.61

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-015	DITTO - MUD/MARSHY MATERIAL, - DO - DO - :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	3.00	DAYS	B0-004	4,582.02		
	ALLOW 2.5% ON LABOUR FOR TOOLS				114.55		
	BASKETS(PANS)	0.33	NO.	B0-631	86.67		
					4,783.24		
	COST PER 2.83 CU.M				4,783.24		
	RATE PER 1 CU.M			E1-015	1,690.19		
				SAY	1,690.20	1,619.09	71.11
	* ITEM NOS. E1-016 TO E1-018 DELETED						
E1-019	EXCAVATING SOFT ROCK, NOT EXCEEDING 1.5 M DEPTH [SSCM 301.2(II)] :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				152.73		
	BASKETS	0.33	NO.	B0-631	86.67		
					6,348.76		
	COST PER 2.83 CU.M				6,348.76		
	RATE PER 1 CU.M			E1-019	2,243.38		
				SAY	2,243.40	2,158.78	84.62
	* NOTE: EXCAVATING ROCK FOR FOUNDATION TO BE PAID ON S.S.R.						
	* ITEM NO. E1-020 DELETED.						
E1-021	PILING AVAILABLE SOIL :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	0.25	DAYS	B0-004	381.84		
	ALLOW 2.5% ON LABOUR FOR TOOLS				9.55		
					391.38		
	COST PER 2.83 CU.M				391.38		
	RATE PER 1 CU.M			E1-021	138.30		
				SAY	138.30	134.92	3.38
E1-022	LOADING AVAILABLE SOIL TO A TRACTOR OR: EQUIVALENT .						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	0.33	DAYS	B0-004	504.02		
	ALLOW 2.5% ON LABOUR FOR TOOLS				12.60		
					516.62		
	COST PER 2.83 CU.M				516.62		
	RATE PER 1 CU.M			E1-022	182.55		
				SAY	182.55	178.10	4.45

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-023	EXCAVATING ROCK, REQUIRING BLASTING, FOR ROADWAY AND AT QUARRY FOR BOULDERS (EXCLUDING DOZING AWAY [SSCM 301.2(III) & 306.1 - 306.4] : DATA FOR 32 CU.M (BANK MEASUREMENT)						
	(A) BLAST HOLE DRILLING						
	CONSIDER 1.5 M X 1.5 M HOLE PATTERN DRILL RATE = 68 M/8 HRS OUTPUT PER HR = 32 CU.M EQUIPMENT (DRILLING)						
	* TRACK DRILL CRAWLER (Wet lease)	1.50	HOUR	B0-143	2,770.70		
	* COMPRESSOR AIR CFM 750(Wet lease)	1.50	HOUR	B0-144	10,308.62		
	COST PER 32 CU.M			(A)	13,079.31		
	(B) CHARGING/STEMMING BLAST HOLES						
	MATERIAL						
	WATER GEL	13.50	KG	B0-506	11,553.30		
	AMMONIUM NITRATE	15.39	KG	B0-507	2,937.95		
	DETONATORS	7.00	NO	B0-504	671.30		
	FUSE	8.00	M	B0-502	3,104.00		
	DIESELENE	1.85	LTR.	B0-612	192.40		
	SUB TOTAL				18,458.95		
	LABOUR						
	BLASTER (SK A) 1 NO X 1 HOUR	0.13	DAY	B0-001	237.50		
	LABOUR (SK B) 2 NOS X 1 HOUR	0.25	DAY	B0-002	425.00		
	LABOUR (S/SK.) 2 NOS X 1 HOUR	0.25	DAY	B0-003	400.00		
	SUB TOTAL				1,062.50		
	COST PER 32 CU.M			(B)	19,521.45		
				(A)+(B)	32,600.76		
	TOTAL COST PER 32 CU.M				32,600.76		
	RATE PER 1 CU.M (Bank Measure))			E1-023	1,018.77		
				SAY	1,018.75	33.20	985.55
E1-024	BOULDERS SLEDGING, PILING, ETC.:						
	DATA FOR 2.83 CU.M						
	LABOUR (SK-B)	1.00	DAY	B0-002	1,700.00		
	LABOUR (U/SK)	2.00	DAY	B0-004	3,054.68		
	FOR COLLECT, PREPARE DEPOT & PILING:						
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	LABOUR (S/SK)	0.50	DAY	B0-003	800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				177.05		
					7,259.07		
	COST PER 2.83 CU.M				7,259.07		
	RATE PER 1 CU.M			E1-024	2,565.04		
				SAY	2,565.05	2,502.48	62.57

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-025	ROCK REQUIRING BLASTING :						
	DATA FOR 2.83 CU.M (BANK MEASUREMENT)						
	LABOUR (SK A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (SK B)	2.00	DAYS	B0-002	3,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				132.50		
	ALLOW FOR FUEL FORGE ETC.	1.00	ITEM	B0-723	48.90		
	POWDER	0.34	KG	B0-501	201.91		
	FUSE	3.05	M	B0-502	1,182.62		
	STEEL	0.45	KG	B0-503	119.91		
					6,985.84		
	COST PER 2.83 CU.M				6,985.84		
	RATE PER 1 CU.M			E1-025	2,468.50		
				SAY	2,468.50	1,872.79	595.71
E1-026	ROCK REQUIRING BLASTING SLEDGING AND PILING :						
	DATA FOR 2.83 CU.M (BANK MEASUREMENT)						
	LABOUR (SK A) MINER	1.00	DAY	B0-001	1,900.00		
	LABOUR (SK B) SLEDGER	1.50	DAYS	B0-002	2,550.00		
	LABOUR (U/SK) COLLECT	1.50	DAY	B0-004	2,291.01		
	LABOUR (S/SK) PILING	0.50	DAY	B0-003	800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				188.53		
	ALLOW FOR FUEL FORGE ETC.	1.00	ITEM	B0-723	48.90		
	POWDER	0.34	KG	B0-501	201.91		
	FUSE	3.05	M	B0-502	1,182.62		
	STEEL	0.45	KG	B0-503	119.91		
					9,282.88		
	COST PER 2.83 CU.M				9,282.88		
	RATE PER 1 CU.M			E1-026	3,280.17		
				SAY	3,280.15	2,664.67	615.48
E1-027	ROADWAY EXCAVATION IN UNCLASSIFIED SOIL USING MACHINERY EXCLUDING LOADING AND PILING. (CUTTING MEASUREMENT)						
	DATA FOR 1 HOUR EXCAVATION MACHINE EXCAVATOR MOBILE .4 CU.M BUCKET DOZER TYPE D4-E						
	DOZER EXCAVATION PER HR.	16.11	CU.M (BANK VOL)				
	EXCAVATOR OUTPUT PER HOUR	38.96	CU.M (BANK VOL)				
	TOTAL OUTPUT PER HOUR	55.07	CU.M (BANK VOL)				
	HIRE RATE FOR DOZER WET LEASE	1.00	HOUR	B0-154	4,770.05		
	HIRE RATE FOR EXCAVATOR WET LEASE	1.00	HOUR	B0-155	7,289.45		
	COST OF BANKS MEN S/SK	2.00	HOUR	B0-003	400.00		
	TOTAL COST ON EXCAVATION PER HOUR				12,459.50		
	RATE PER 1 CU.M (CUTTING MEASUREMENT)			E1-027	226.25		
				SAY	226.25	7.26	218.99

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
E1-028	LOADING MATERIAL BY MACHINERY IN ROADWAY EXCAVATIONS (CUTTING MEASUREMENT)						
	DATA FOR 5 HOUR WORKING BY LOADER AS IN BORROW EXCAVATION						
	OUTPUT FOR 5 HOURS	337.50	CU.M(LOOSE)				
	EFFICENCY OF WORKING	85.00	%				
	OUTPUT IN 5 HOURS AT 85% EFFICENCY	286.88	CU.M(LOOSE)				
	BULKING	15.00	%				
	OUTPUT IN 5 HOURS AT 85% EFFICENCY	249.46	CU.M (BANK VOL)				
	OUT PUT PER HOUR	49.89	CU.M (BANK VOL)				
	HIRE CHARGES FOR LOADER FOR	1.00	HOURS	B0-124	5,098.14		
	COST OF BANKS MAN S/SK	1.00	HOUR	B0-003	200.00		
	TOTAL COST PER	49.89	CU.M (BANK VOL)		5,298.14		
	RATE PER 1 CU.M (CUTTING MEASUREMENT)			E1-028	106.19		
				SAY	106.20	4.01	102.19
E1-029	TRIMMING / CAMBERING BY MOTOR GRADER (CUTTING MEASUREMENT)						
	DATA FOR 1025 SQ.M FOR A 200 MM THICK LAYER						
	VOLUME OF SOIL IN THE AREA	205.00	CU.M (BANK VOL)				
	GRADER BLADE EFFICENCY	85.00	%				
	TIME FOR 4 PASSES IN 1025 SQ M AREA	1.50	HOURS				
	HIRE CHARGES 120-140 HP MOTOR GRADER	1.50	HOURS	B0-114	8,217.91		
	COST OF BANKS MAN S/SK	1.50	HOUR	B0-003	300.00		
	TOTAL COST PER	205.00	CU.M (BANK VOL)		8,517.91		
	RATE PER 1 CU.M (CUTTING MEASUREMENT)			E1-029	41.55		
				SAY	41.55	1.46	40.09
E1-029A	TRIMMING / CAMBERING BY MOTOR GRADER (CUTTING MEASUREMENT)						
	RATE PER 1 SQ.M			E1-029A	8.31		
				SAY	8.30	0.29	8.01

* * *

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION III =====							
AGGREGATE / RUBBLE PILING INCLUDING LOADING -----							
A1-001	SLEDGING AVAILABLE ROCK 150-225 MM RUBBLE INCLUDING PILING & LOADING :						
	DATA FOR 2.83 CU.M						
	LABOUR (SK/B)	1.00	DAY	B0-002	1,700.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				139.78		

					5,730.79		

	COST PER 2.83 CU.M				5,730.79		
	RATE PER 1 CU.M			A1-001	2,025.01		
					=====		
				SAY	2,025.00	1,975.62	49.38
A1-002	BLASTING ETC. & PILING 150-225MM RUBBLE INCLUDING LOADING :						
	DATA FOR 2.83 CU.M						
	LABOUR (SK/A) MINER	1.00	DAY	B0-001	1,900.00		
	LABOUR (SK/B) SLEDGER	1.00	DAY	B0-002	1,700.00		
	COLLECT, PREPARE DEPOT PILING, LOADING ETC.						
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	LABOUR (S/SK) LOADING, PILING ETC.	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				187.28		
	ALLOW FOR FUEL FORGE ETC.	1.00	ITEM	B0-723	48.90		
	POWDER	0.34	KG	B0-501	201.91		
	FUSE	3.05	M	B0-502	1,182.62		
	STEEL	0.45	KG	B0-503	119.91		

					9,231.63		

	COST PER 2.83 CU.M				9,231.63		
	RATE PER 1 CU.M(PILED) INCLUDING LOADING			A1-002	3,262.06		
					=====		
				SAY	3,262.05	2647.00	615.05

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
A1-002A	BLASTING SLEDGING ETC. & PILING 150-225MM RUBBLE USING COMPRESSOR & HAND HELD DRILLS INCLUDING LOADING :						
	DATA FOR 60 CU.M (BANK MEASURE)						
	AIR COMPRESSOR 250 CFM						
	2 NOS. ROCK DRILL 37.5 MM BIT 100 CFM						
	CONSIDER DRILLING PATTERN 1MX1M GRID X 1.7M DEPTH	1.70	M HOLE DEPTH				
	BLAST DEPTH	1.50	M				
	PRODUCTION PER HOLE [1X1X1.5]	1.50	CU.M				
	ASSUME NO. OF HOLES PER BLAST	20.00	NOS.				
	PRODUCTION PER BLAST CYCLE	30.00	CU.M (BANK MEASURE)				
	RATE OF DRILLING PER MINUTE	0.15	M				
	TIME FOR 2 DRILLS FOR 20 HOLES [((1.7/.15)X20)/2/60]	1.89	HOURS				
	ASSUME TIME PER CYCLE INCLUDING CHARGING, BLASTING						
	DOZING ETC.	4.00	HOURS				
	PRODUCTION PER DAY	60.00	CU.M (BANK MEASURE)				
	ASSUMED BULKING AFTER PILING	20.00	%				
	LABOUR SK'A' MINER	1.00	DAY	B0-001	1,900.00		
	LABOUR U/SK SLEDGING	20.00	DAY	B0-004	30,546.80		
	LABOUR S/SK PILING ETC.	15.00	DAY	B0-003	24,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,411.17		
	DRILL STEEL	68.00	METER	B0-649	7,730.24		
	WATER GEL	25.20	KG	B0-506	21,566.16		
	AMMONIUM NITRATE	28.80	KG	B0-507	5,497.92		
	DETONATORS	13.00	NO.	B0-504	1,246.70		
	FUSE	15.00	M	B0-502	5,820.00		
	DIESELENE	3.46	LTR	B0-612	359.42		
	COMPRESSOR 250 CFM	8.00	HOURS	B0-156	21,298.96		
	ROCK DRILL HAND HELD	8.00	HOURS	B0-158	2,353.36		
	WHEEL LOADER	0.75	DAY	B0-124A	27,299.71		
	COST PER 60 CU.M				151,030.44		
	COST PER 60 CU.M (BANK MEASURE)				151,030.44		
	RATE PER 1 CU.M (BANK MEASURE)				2,517.17		
	RATE PER 1 CU.M (PILED)						
				A1-002A	2,097.65		
				SAY	2,097.65	783.98	1,313.67
A1-003	BLASTING ETC. & PILING 100 MM AGGREGATE, INCLUDING LOADING :	1.00	CU.M	B0-303	1,590.11		
	RATE PER 1 CU.M			A1-003	1,590.11		
				SAY	1,590.10		External Sources

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

<u>CODE</u>	<u>DESCRIPTION OF ITEM</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>PRICE CODE</u>	<u>AMOUNT</u> <u>(Rs.)</u>	<u>LABOUR</u> <u>INPUT</u>	<u>OTHER</u> <u>INPUTS</u>
A1-004	BLASTING ETC. & PILING 75 MM AGGREGATE INCLUDING LOADING :	1.00	CU.M	B0-304	1,413.43		
	RATE PER 1 CU.M			A1-004	1,413.43		
				SAY	1,413.45	External Sources	
A1-005	BLASTING ETC. & PILING 50 MM AGGREGATE INCLUDING LOADING :	1.00	CU.M	B0-305	1,643.11		
	RATE PER 1 CU.M			A1-005	1,643.11		
				SAY	1,643.10	External Sources	
A1-006	BLASTING ETC. & PILING 37.5 MM AGGREGATE INCLUDING LOADING :		ITEM DELETED				

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
A1-007	BLASTING ETC. & PILING 25 MM AGGREGATE INCLUDING LOADING :						
				ITEM DELETED			
A1-008	BLASTING ETC. & PILING 19 MM AGGREGATE INCLUDING LOADING : *						
				ITEM DELETED			
	* PRIOR APPROVAL OF THE P.DD SHOULD BE OBTAINED FOR THE USE OF 19 MM, 25 MM AND 37.5 MM HAND BROKEN AGGREGATE.						
A1-009	50 MM AGGREGATE, SINGLE SIZE CRUSHER PRODUCTION INCLUDING PILING AND LOADING [SSCM404.1-406.1] :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-311	2,400.00		
	RATE PER 1 CU.M			A1-009	2,400.00		
				SAY	2,400.00		External Sources

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
A1-010	37.5 MM AGGREGATE, SINGLE SIZE CRUSHER PRODUCTION INCLUDING PILING AND LOADING [SSCM404.1-406.1] :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-310	2,200.00		
	RATE PER 1 CU.M			A1-010	2,200.00		
				SAY	2,200.00		External Sources
A1-011	19 MM AGGREGATE, SINGLE SIZE CRUSHER PRODUCTION INCLUDING PILING AND LOADING [SSCM404.1-406.1] :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-308A	2,900.00		
	RATE PER 1 CU.M			A1-011	2,900.00		
				SAY	2,900.00		External Sources
A1-012	12.5 MM AGGREGATE, SINGLE SIZE CRUSHER PRODUCTION INCLUDING PILING AND LOADING FOR 1.0 CU.M :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-309	2,900.00		
	RATE PER 1 CU.M			A1-012	2,900.00		
				SAY	2,900.00		External Sources
	PLANT PRODUCED AGGREGATE FOR DENSE GRADED AGGREGATE BASE COURSE						
A1-013	AGGREGATE 37.5 MM, DOWN GRADED (SSCM - TABLE 1701.5) INCLUDING PILING & LOADING :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-313	2,200.00		
	RATE PER 1 CU.M			A1-013	2,200.00		
				SAY	2,200.00		External Sources
A1-014	CRUSHER FINES 6.3 MM DOWN, INCLUDING PILING AND LOADING FOR 1.0 CU.M :						
	DATA FOR 1 CU.M						
	EX-PLANT	1.00	CU.M	B0-312	1,700.00		
	RATE PER 1 CU.M			A1-014	1,700.00		
				SAY	1,700.00		External Sources

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
A1-015	AGGREGATE 19 MM FOR SEAL COAT TREATMENTS AS PER SSCM TABLE 1701-8, INCLUDING - D0 - DATA FOR 1 CU.M ----- EX-PLANT	1.00	CU.M	B0-314	2,296.82		
	RATE PER 1 CU.M			A1-015	2,296.82		
				SAY	2,296.80	External Sources	
A1-016	AGGREGATE 12.5 MM FOR SEAL COAT TREATMENTS AS PER SSCM TABLE 1701-8, INCLUDING - DO - DATA FOR 1 CU.M ----- EX-PLANT	1.00	CU.M	B0-315	2,473.50		
	RATE PER 1 CU.M			A1-016	2,473.50		
				SAY	2,473.50	External Sources	
A1-017	BLENDED AGGREGATE FOR RECTIFICATION OVERLAY, WITH 37.5 MM SINGLE SIZE AGGREGATE AND 19 MM & 12.5 MM CRUSHED AGGREGATE MIXED IN THE VOLUME RATIO OF 7:2:1 INCLUDING MIXING AND LOADING.(PILING TO PAY SEPARATELY): * DATA FOR MIXED VOLUME OF 28.3 CU.M ----- ASSUME 15% & 20% EXTRA VOLUME FOR 19 MM AND 12.5 MM AGGREGATE RESPECTIVELY ON ACCOUNT OF FILLING UP OF VOIDS. 37.5 MM AGGRREGATE (LESS PILING) 19.81 CU.M B0-310 40,711.53 19 MM AGGREGATE - DO - (2X2.83X1.15) 6.51 CU.M B0-308A 17,935.70 12.5 MM AGG. - DO - (1X2.83X1.20) 3.40 CU.M B0-309 9,367.34 PLANT FOR MIXING: LOADER-1.7 CU.M, @ 100 CU.M/4 HRS. 0.14 DAY B0-116A 4,393.86 72,408.43 COST OF 28.3 CU.M INCLUDING BLENDING 72,408.43 RATE PER 1 CU.M OF BLENDED AGGREGATE	19.81	CU.M	B0-310	40,711.53		
		6.51	CU.M	B0-308A	17,935.70		
		3.40	CU.M	B0-309	9,367.34		
		0.14	DAY	B0-116A	4,393.86		
					72,408.43		
					72,408.43		
				A1-017	2,558.60		
				SAY	2,558.60	0.00	2,558.60
	NOTE: PRIOR APPROVAL OF THE P.DD SHOULD BE OBTAINED FOR THE USE OF BLENDED AGGREGATE IN RECTIFICATION OVERLAY CONSTRUCTION WORK.						
A1-018	PILING AVAILABLE AGGREGATE: DATA FOR 2.83 CU.M ----- LABOUR (S/SK) 0.25 DAY B0-003 400.00 ALLOW 2.5% ON LABOUR FOR TOOLS 10.00 410.00 COST PER 2.83 CU.M 410.00 RATE PER 1 CU.M	0.25	DAY	B0-003	400.00		
					10.00		
					410.00		
					410.00		
				A1-018	144.88		
				SAY	144.90	141.34	3.56

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
A1-019	PILING AVAILABLE RUBBLE:						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)	0.50	DAY	B0-003	800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				20.00		
					820.00		
	COST PER 2.83 CU.M				820.00		
	RATE PER 1 CU.M			A1-019	289.75		
				SAY	289.75	282.69	7.06
A1-020	LOADING AVAILABLE AGGREGATE/RUBBLE :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOLS				19.09		
					782.76		
	COST PER 2.83 CU.M				782.76		
	RATE PER 1 CU.M			A1-020	276.59		
				SAY	276.60	269.85	6.75

* * *

HSR - 2021
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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
	SECTION IV =====						
	APPROVED EARTH FILLING & COMPACTION -----						
	* NOTE -----						
	RATES FOR BORROW EARTH SUPPLY GIVEN UNDER ITEM CODES EW1-001 & EW1-011 IN THIS SCHEDULE ARE BASED ON MANUAL EXCAVATION AND INTENDED FOR SMALL WORKS INVOLVING LESS THAN 200 CU.M. IN THE CASE OF BORROW EARTH SUPPLY EXCEEDS 200 CU.M(FOR THE WHOLE PROJECT), RATES BASED ON MACHINE EXCAVATION AS PER B0-201, B0-202, EW1-013 OR EW1-014 SHALL BE ADOPTED. FOR ANY DEVIATIONS THE PROCEDURE GIVEN IN "GENERAL NOTES" SHALL BE FOLLOWED.						
EW1-001	APPROVED SOIL (TYPE I & II MATERIALS) EXCAVATION FOR SUB BASES & SHOULDER CONSTRUCTION INCLUDING LOADING AND PILING. (LOOSE VOLUME) [SSCM 601.1 TO 601.4] :						
	DATA FOR 2.83 CU.M -----						
	EXCAVATING-AS IN E1-008	2.83	CU.M	E1-008	4,065.72		
	LABOUR (U/SK)	0.33	DAY	B0-004	504.02		
	ALLOW 2.5% ON LABOUR FOR TOOLS				12.60		
	BASKETS (1/6)	0.17	NO.	B0-631	43.33		

					4,625.68		

	COST PER 2.83 CU.M				4,625.68		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-001	1,634.51		
					=====		
				SAY	1,634.50	1,554.32	80.18
EW1-002	SPREADING PILED APPROVED SOIL (LOOSE VOLUME):						
	DATA FOR 22.65 CU.M -----						
	LABOUR (U/SK)	2.50	DAYS	B0-004	3,818.35		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.46		
	BASKETS	2.25	NOS.	B0-631	585.00		

					4,498.81		

	COST PER 22.65 CU.M				4,498.81		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-002	198.62		
					=====		
				SAY	198.60	168.58	30.02

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
EW1-003	APPROVED SOIL SPREAD & ROLLED INCLUDING ROLLER HIRE CHARGES, FUEL & WATERING (LOOSE VOLUME)* [SSCM 601.1 TO 4] :						
	* SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME.						
	DATA FOR 2.83 CU.M						
	SPREADING-AS IN EW1-002	2.83	CU.M	EW1-002	562.04		
	WATERING	2.83	CU.M	B0-784	50.23		
	ROLLER CHARGES(8-10 TONS)	0.04255	DAY	B0-111	537.70		

					1,149.97		

	COST PER 2.83 CU.M				1,149.97		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-003	406.35		
					=====		
				SAY	406.35	168.58	237.77
	NOTE* THE ITEMS EW1-003 OR EW1-004 ON MANUAL SPREADING SHOULD BE ADOPTED ON APPROVAL BY PD / CE FOR SMALL WORKS ONLY. WHEN MACHINERY IS USED FOR SPREADING AND COMPACTION, EW1-003A SHALL BE ADOPTED.						
EW1-003A	APPROVED SOIL SPREAD & ROLLED USING MACHINERY INCLUDING MOTOR GRADER & ROLLER HIRE CHARGES, FUEL & WATERING (LOOSE VOLUME)* [SSCM 601.1 TO 4] :						
	* SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME.						
	DATA FOR 210 CU.M						
	MOTOR GRADER (120-140 HP)	2.50	HOURS	B0-114	13,696.51		
	WATERING	210.00	CU.M	B0-784	3,727.50		
	ROLLER CHARGES (VIBRATING 10 TONS)	1.00	DAY	B0-110	33,843.83		

					51,267.84		

					51,267.84		
				EW1-003A	244.13		
					=====		
				SAY	244.15	0.00	244.15
EW1-004	APPROVED SOIL SPREAD & ROLLED IN STRIPS WHERE AVERAGE WIDTH IS LESS THAN 1.2 METRES FOR ROAD WIDENING, INCLUDING ROLLER HIRE CHARGES, FUEL & WATERING (LOOSE VOLUME)* [SSCM 601.1 TO 4] :						
	* SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME. ASSUMING 50 CU.M COPACTION PER DAY						
	DATA FOR 2.83 CU.M						
	SPREADING-AS IN EW1-002	2.83	CU.M	EW1-002	562.04		
	WATERING	2.83	CU.M	B0-784	50.23		
	ROLLER CHARGES(8-10 TONS)	0.06	DAY	B0-111	758.15		

					1,370.42		

	COST PER 2.83 CU.M				1,370.42		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-004	484.25		
					=====		
				SAY	484.25	168.58	315.67

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
EW1-005 DELETED							
EW1-006	APPROVED SOIL SPREAD AND COMPACTED IN PLACES BEHIND ABUTMENTS AND STRUCTURES, SHOULDERS ABOVE SUB BASE LEVEL AND IN SERVICE LINE TRENCHES, USING 1/2 TO 1 TON VIBRATING ROLLER INCLUDING WATERING (LOOSE VOLUME):						
	* SEE GENERAL NOTES SECTION 26.4 FOR RATE ON COMPACTED VOLUME.						
	DATA FOR 7 CU.M (LOOSE)						
	LABOUR - U/SK FOR TRANS. & SPREADING	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.18		
	BASKET	0.75	NO.	B0-631	195.00		
	VIB. ROLLER (1/2 - 1 TON) 2 HOURS	0.25	DAY	B0-109	1,754.18		
	WATERING	7.00	ITEM	B0-784	124.25		
					3,638.96		
	COST PER 7 CU.M				3,638.96		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-006	519.85		
				SAY	519.85	218.19	301.66
EW1-007	APPROVED SOIL SPREAD AND COMPACTED IN 150 TO 225 MM THICK LAYERS USING MACHINE RAMMER AT NARROW PLACES (LOOSE VOLUME) :						
	DATA FOR 7 CU.M (LOOSE VOLUME)						
	LABOUR - U/SK FOR TRANS. & SPREADING	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.18		
	BASKET	0.75	NO.	B0-631	195.00		
	RAMMER - 60 KG	0.50	DAY	B0-108	1,999.97		
	WATERING	6.00	ITEM	B0-784	106.50		
					3,866.99		
	COST PER 7 CU.M				3,866.99		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-007	552.43		
				SAY	552.45	218.19	334.26
EW1-008	SPREADING, LEVELLING AND COMPACTING MANUALLY USING STANDARD CAST IRON STAMPER OR EQUIVALENT AND FILLING IN 150-225 MM THICK LAYERS (LOOSE VOLUME) :						
	DATA FOR 5.66 CU.M						
	LABOUR (U/SK) - SPREADING & COMPACT.	2.25	DAYS	B0-004	3,436.52		
	ALLOW 2.5% ON LABOUR FOR TOOLS				85.91		
					3,522.43		
	COST PER 5.66 CU.M				3,522.43		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-008	622.34		
				SAY	622.35	607.16	15.19

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
EW1-009	TRIMMING, LEVELLING AND COMPACTION OF ORIGINAL GROUND/SUBGRADE TO 100% STD. DENSITY. [SSCM 304.3(C)] :						
	DATA FOR 1000 SQ.M						
	LABOUR SK'B'	1.00	DAY	B0-002	1,700.00		
	LABOUR U/SK	2.00	DAY	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				118.87		
	MOTOR GRADER (120-140 HP) SCARIFYING AND SPREADING) - MINIMUM	0.50	DAY	B0-114	21,914.42		
	WATER BOWSER (6000 LTRS)	0.50	DAY	B0-128	5,200.00		
	VIBRATING ROLLER (SMOOTH 10 TON) [2X6 HOURS]	1.50	DAYS	B0-110	50,765.75		
					82,753.71		
	COST PER 1000 SQ.M				82,753.71		
	RATE PER 1 SQ.M			EW1-009	82.75		
				SAY	82.75	4.75	78.00
EW1-010	TRIMMING, LEVELLING AND COMPACTION OF ORIGINAL GROUND/SUBGRADE TO 95% STD. DENSITY. [SSCM 304.3(C)] :						
	DATA FOR 1100 SQ.M						
	LABOUR SK'B'	1.00	DAY	B0-002	1,700.00		
	LABOUR U/SK	2.00	DAY	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				118.87		
	MOTOR GRADER (120-140 HP) SCARIFYING AND SPREADING) - MINIMUM	0.50	DAY	B0-114	21,914.42		
	WATER BOWSER (6000 LTRS)	0.50	DAY	B0-128	5,200.00		
	VIBRATING ROLLER (SMOOTH 10 TON) [2X6 HOURS]	1.50	DAYS	B0-110	50,765.75		
					82,753.71		
	COST PER 1100 SQ.M				82,753.71		
	RATE PER 1 SQ.M			EW1-010	75.23		
				SAY	75.25	4.32	70.93
EW1-011	APPROVED SOIL EXCAVATION FOR EMBANKMENT FILLING INCLUDING LOADING AND PILING (LOOSE VOLUME) [SSCM 601.1 TO 601.4]						
	DATA FOR 2.83 CU.M						
	EXCAVATING-AS IN E1-006	2.83	CU.M	E1-006	2,735.05		
	LABOUR (U/SK)	0.33	DAY	B0-004	504.02		
	ALLOW 2.5% ON LABOUR FOR TOOLS				12.60		
	BASKETS (1/6)	0.17	NO.	B0-631	43.33		
					3,295.01		
	COST PER 2.83 CU.M				3,295.01		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-011	1,164.31		
				SAY	1,164.30	1,095.58	68.72
EW1-012	DELETED						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
EW1-013	APPROVED SOIL (TYPE I & II MATERIALS) EXCAVATION USING MACHINERY FOR SUB BASES & SHOULDER CONSTRUCTION INCLUDING LOADING AND PILING. (LOOSE VOLUME) [SSCM 601.1 TO 604.4] :						
	DATA FOR 2.83 CU.M						
	EXCAVATING APPROVED MATERIAL	2.83	CU.M	B0-201	1,698.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	381.84		
	ALLOW 2.5% ON LABOUR FOR TOOLS				9.55		

					2,089.38		

	COST PER 2.83 CU.M				2,089.38		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-013	738.30		
					=====		
				SAY	738.30	134.92	603.38
EW1-014	APPROVED SOIL(TYPE I & II) EXCAVATION USING MACHINERY FOR EMBANKMENT FILLING INCLUDING LOADING AND PILING (LOOSE VOLUME) [SSCM 601.1 TO 604.4]						
	DATA FOR 2.83 CU.M						
	EXCAVATING APPROVED MATERIAL	2.83	CU.M	B0-202	707.50		
	LABOUR (U/SK)	0.25	DAY	B0-004	381.84		
	ALLOW 2.5% ON LABOUR FOR TOOLS				9.55		

					1,098.88		

	COST PER 2.83 CU.M				1,098.88		
	RATE PER 1 CU.M (LOOSE VOLUME)			EW1-014	388.30		
					=====		
				SAY	388.30	134.92	253.38
EW1-015	GRADING AND SPREADING BY MOTOR GRADER						
	DATA FOR OUT PUT IN 6 HOURS SPREADING & COMPACTION						
	ASSUMED OUTPUT PER HOUR	35.00	CU.M(LOOSE)				
	TOTAL OUTPUT IN 6 HOURS	210.00	CU.M(LOOSE)				
	ACTUAL GRADING TIME EXCLUDING FOR WATERING AND COMPACTION DURING 6 HOUR DURATION	3.00	HOURS				
	COST ON MOTOR GRADER	3.00	HOURS	B0-114	16,435.81		

	TOTAL COST PER 210 CU.M				16,435.81		
	RATE PER CU.M (LOOSE)			EW1-015	78.27		
					=====		
				SAY	78.25	0.00	78.25

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION V							
RUBBLE PITCHING / PAVING							
(RUBBLE TO BE PAID SEPARATELY)							
P1-001	PITCHED PAVING 225 MM THICK:						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				80.00		
					3,280.00		
	COST PER 9.29 SQ.M				3,280.00		
	RATE PER 1 SQ.M			P1-001	353.07		
				SAY	353.05	344.46	8.59
P1-002	PITCHED PAVING 150 MM THICK:						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	1.50	DAYS	B0-003	2,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				60.00		
					2,460.00		
	COST PER 9.29 SQ.M				2,460.00		
	RATE PER 1 SQ.M			P1-002	264.80		
				SAY	264.80	258.34	6.46
P1-003	FLAT PAVING 225 MM THICK:						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	1.33	DAY	B0-003	2,128.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				53.20		
					2,181.20		
	COST PER 9.29 SQ.M				2,181.20		
	RATE PER 1 SQ.M			P1-003	234.79		
				SAY	234.80	229.06	5.74
P1-004	FLAT PAVING 150 MM THICK:						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				40.00		
					1,640.00		
	COST PER 9.29 SQ.M				1,640.00		
	RATE PER 1 SQ.M			P1-004	176.53		
				SAY	176.55	172.23	4.32

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION VI ===== AGGREGATE SPREADING & COMPACTION ===== COST OF WATERING TO BE DEDUCTED FROM RATE IF NOT CARRIED OUT UNDER THE RELEVANT ITEMS.							
NOTE: COST OF AGGREGATE SUPPLY AND TRANSPORT, NOT INCLUDED IN THE RATES FOR ITEMS: M1-001, M1-004,M1-007,M1-008 AND M1-009							
M1-001	SPREADING, WATERING & ROLLING 100 MM AGGREGATE INCLUDING HIRE CHARGES OF ROLLER. (LOOSE VOLUME) [SSCM 304.3(d),(e)]:						
	DATA FOR 22.65 CU.M						
	LABOUR (S/SK)	5.00	DAY	B0-003	8,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS				200.00		
	ALLOW FOR WATERING	4.00	NOS.	B0-631	1,040.00		
	ROLLER CHARGES ETC.(8-10 TONS)	22.65	CU.M	B0-785	535.67		
		0.84	DAY	B0-111	10,614.11		

					20,389.78		
	COST PER 22.65 CU.M				-----		
					20,389.78		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-001	900.21		
					=====		
				SAY	900.20	353.20	547.00
M1-002	BREAKING ROAD SURFACE TO 50 MM DEPTH BY HAND, SCREEN & REPLACE OLD AGGREGATE. :						
	DATA FOR 306.58 SQ.M						
	PICKING:						
	LABOUR (SK/A)	0.25	DAY	B0-001	475.00		
	LABOUR (U/SK)	11.00	DAYS	B0-004	16,800.74		
	REMOVING PICKED AGGREGATE/SCREENING:						
	LABOUR (U/SK)	6.00	DAYS	B0-004	9,164.04		
	SPREADING OLD AGGREGATE:						
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				740.99		
	ALLOW FOR FUEL ETC.	1.00	ITEM	B0-720	38.90		
	BASKETS	3.00	NOS.	B0-631	780.00		

					31,199.67		
	COST PER 306.58 SQ.M				-----		
					31,199.67		
	RATE PER 1 SQ.M			M1-002	101.77		
					=====		
				SAY	101.75	96.68	5.07

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
M1-003	SCARIFYING ROAD SURFACE TO 50 MM DEPTH BY MACHINERY, SCREEN, & REPLACE OLD AGGREGATE. :						
	DATA FOR 306.58 SQ.M						
	SCARIFYING:						
	LABOUR (S/SK)	0.25	DAY	B0-003	400.00		
	REMOVING SCARIFIED AGGRE. & SCREENING:						
	LABOUR (U/SK)	6.00	DAYS	B0-004	9,164.04		
	SPREADING OLD AGGREGATE:						
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				319.10		
	ALLOW FOR SHARPENING TYNES	1.00	ITEM	B0-752	50.15		
	BASKETS	3.00	NOS.	B0-631	780.00		
	ROLLER CHARGES ETC.(8-10 TONS)	0.84	DAY	B0-111	10,614.11		
					24,527.40		
	COST PER 306.58 SQ.M				24,527.40		
	RATE PER 1 SQ.M			M1-003	80.00		
				SAY	80.00	41.63	38.37
M1-004	SPREADING & COMPACTING 50-19 MM NEW AGGREGATE BY ROLLER INCLUDING WATERING HIRE, ETC.(LOOSE VOLUME)[SSCM 403.3(c)]:						
	DATA FOR 19.82 CU.M						
	LABOUR (U/SK)-SCREENING	2.75	DAYS	B0-004	4,200.19		
	LABOUR (S/SK)-BLINDING	0.50	DAY	B0-003	800.00		
	LABOUR (S/SK)	5.25	DAYS	B0-003	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				335.00		
	ROLLER CHARGES ETC.(8-10 TONS)	0.84	DAY	B0-111	10,614.11		
	HIGHER OF TRACTOR & TRAILER	0.22	DAY	B0-117	1,415.26		
	HIRE OF WATER TANK AND PUMP (50 MM)	0.22	DAY	B0-104	279.85		
	BASKETS	3.50	NOS	B0-631	910.00		
					26,954.40		
	COST PER 19.82 CU.M				26,954.40		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-004	1,359.96		
				SAY	1,359.95	676.09	683.86
M1-005	BREAKING 50 MM ADDITIONAL DEPTH BY HAND SCREENING & REPLACING OLD AGGREGATE. :						
	DATA FOR 306.58 SQ.M						
	LABOUR (SK/A)	0.25	DAY	B0-001	475.00		
	LABOUR (U/SK) - PICKING	6.00	DAYS	B0-004	9,164.04		
	LABOUR (U/SK) - PICK,SCREEN	3.00	DAYS	B0-004	4,582.02		
	LABOUR (S/SK) - SPREADING	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				435.53		
	ALLOW FOR FUEL ETC.	1.00	ITEM	B0-720	38.90		
	BASKETS	3.00	NOS.	B0-631	780.00		
					18,675.49		
	COST PER 306.58 SQ.M				18,675.49		
	RATE PER 1 SQ.M			M1-005	60.92		
				SAY	60.90	56.82	4.08

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
M1-006	SCARIFYING 50 MM ADDITIONAL DEPTH WITH MACHINERY, SCREENING & REPLACING OLD AGGREGATE. :						
	DATA FOR 306.58 SQ.M						
	LABOUR (S/SK)-SCARIFYING	0.25	DAY	B0-003	400.00		
	LABOUR (U/SK)-SCREEN	3.00	DAYS	B0-004	4,582.02		
	LABOUR (S/SK)-SPREADING	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				204.55		
	ALLOW FOR SHARPENING TYNES BASKETS	1.00	ITEM	B0-752	50.15		
	ROLLER CHARGES ETC.(8-10 TONS)	3.00	NOS	B0-631	780.00		
		0.84	DAY	B0-111	10,614.11		
					19,830.83		
	COST PER 306.58 SQ.M				19,830.83		
	RATE PER 1 SQ.M			M1-006	64.68		
				SAY	64.70	26.69	38.01
M1-007	SPREADING WATERING & COMPACTING 50-19 MM AGGREGATE IN EDGE CORRECTION USING ROLLER INCLUDING HIRE, ETC.(LOOSE VOLUME)[SSCM 1103.3]:						
	DATA FOR 19.82 CU.M						
	LABOUR (S/SK)-BLINDING	0.50	DAY	B0-003	800.00		
	LABOUR (S/SK)-SPREADING	5.25	DAYS	B0-003	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				230.00		
	ROLLER CHARGES ETC.(8-10 TONS)	1.75	DAY	B0-111	22,112.72		
	HIGHER OF TRACTOR & TRAILER	0.22	DAY	B0-117	1,415.26		
	HIRE OF WATER TANK AND PUMP (50 MM) BASKETS	0.22	DAY	B0-104	279.85		
		3.50	NOS.	B0-631	910.00		
					34,147.82		
	COST PER 19.82 CU.M				34,147.82		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-007	1,722.90		
				SAY	1,722.90	464.18	1,258.72
M1-008	SPREADING WATERING & COMPACTING 50-19 MM AGGREGATE IN EDGE CORRECTION USING ROLLER INCLUDING HIRE, ETC.(LOOSE VOLUME)[SSCM 1103.3]:						
	DATA FOR 19.82 CU.M						
	LABOUR (S/SK)-BLINDING	0.50	DAY	B0-003	800.00		
	LABOUR (S/SK)-SPREADING	5.25	DAYS	B0-003	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				230.00		
	ROLLER CHARGES ETC.(8-10 TONS)	1.24	DAY	B0-111	15,668.44		
	HIGHER OF TRACTOR & TRAILER	0.22	DAY	B0-117	1,415.26		
	HIRE OF WATER TANK AND PUMP (50 MM) BASKETS	0.22	DAY	B0-104	279.85		
		3.50	NOS.	B0-631	910.00		
					27,703.55		
	COST PER 19.82 CU.M				27,703.55		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-008	1,397.76		
				SAY	1,397.75	464.18	933.57

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
M1-009	SPREADING & COMPACTING 50-19 MM AGGREGATE BY 8-10 TON ROLLER AFTER APPLYING TACK COAT IN OVERLAY . (LOOSE VOLUME)(TACK COAT PAID SEPARATELY) :						
	DATA FOR 19.82 CU.M						
	LABOUR (S/SK)-BLINDING	0.50	DAY	B0-003	800.00		
	LABOUR (S/SK)-SPREADING	5.25	DAYS	B0-003	8,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				230.00		
	ROLLER CHARGES ETC.(8-10 TONS)	1.05	DAYS	B0-111	13,267.63		
	HIGHER OF TRACTOR & TRAILER	0.22	DAY	B0-117	1,415.26		
	BASKETS	3.50	NOS.	B0-631	910.00		
					25,022.89		
	COST PER 19.82 CU.M				25,022.89		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-009	1,262.51		
				SAY	1,262.50	464.18	798.32
M1-010	WATER BOUND MACADAM - SPREADING WATERING AND COMPACTING 50-25 MM AGGREGATE AND FILLING THE VOIDS TO REFUSAL WITH CRUSHER FINES BY WATERING AND ROLLING TO FORM A WATER BOUND MACADAM BASE EXCLUDING TRANSPORT FOR AGGREGATES AND FINES. (LOOSE VOLUME) [(SSCM 404.1)]:						
	DATA FOR 8.50 CU.M						
	LABOUR (S/SK)-SPREADING	3.00	DAYS	B0-003	4,800.00		
	LABOUR (S/SK)-FILLING VOIDS	0.50	DAY	B0-003	800.00		
	LABOUR (S/SK)-CLEANING	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				180.00		
	AGGREGATE 50-25 MM	8.50	CU.M	B0-310	17,468.55		
	CRUSHER FINES	2.83	CU.M	B0-312	4,811.00		
	ROLLER CHARGES ETC.(8-10 TONS)	0.50	DAY	B0-111	6,317.92		
	HIGHER OF TRACTOR & TRAILER	0.50	DAY	B0-117	3,216.49		
	HIRE OF WATER TANK AND PUMP (50 MM)	0.50	DAY	B0-104	636.02		
					39,829.98		
	COST PER 8.50 CU.M				39,829.98		
	RATE PER 1 CU.M (LOOSE VOLUME) *			M1-010	4,685.88		
				SAY	4,685.90	847.06	3,838.84
* Note	IF AGGREGATE AND CRUSHER FINES ARE NOT PILED AND MEASURED BEFORE SPREADING, COST OF PILING AS PER A1-018 SHALL BE DEDUCTED FROM THE RATE.						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
M1-011	DRY BOUND MACADAM - SPREADING WATERING AND COMPACTING 50-25 MM AGGREGATE AND FILLING THE VOIDS TO REFUSAL WITH CRUSHER FINES BY ROLLING WITH VIBRATING ROLLER TO FORM A DRY BOUND MACADAM BASE EXCLUDING TRANSPORT FOR AGGREGATES AND FINES (LOOSE VOLUME)[SSCM 404.1]:						
	DATA FOR 8.50 CU.M						
	LABOUR (S/SK)-SPREADING	3.00	DAYS	B0-003	4,800.00		
	LABOUR (S/SK)-FILLING VOIDS	0.50	DAY	B0-003	800.00		
	LABOUR (S/SK)-CLEANING	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				180.00		
	AGGREGATE 50-25 MM (LESS PILING)	8.50	CU.M	B0-310	17,468.55		
	CRUSHER FINES	2.83	CU.M	B0-312	4,811.00		
	ROLLER CHARGES ETC.(8-10 TONS)	0.50	DAY	B0-111	6,317.92		
	HIGHER OF TRACTOR & TRAILER	0.25	DAY	B0-117	1,608.25		
	HIRE OF WATER TANK AND PUMP (50 MM)	0.25	DAY	B0-104	318.01		
					37,903.73		
	COST PER 8.50 CU.M				37,903.73		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-011	4,459.26		
				SAY	4,459.25	847.06	3,612.19
	* NOTE IF AGGREGATE AND CRUSHER FINES ARE NOT PILED AND MEASURED BEFORE SPREADING, COST OF PILING AS PER A1-018 SHALL BE DEDUCTED FROM THE RATE.						
M1-012	DELETED						
M1-012A	DENSE GRADED AGGREGATE BASE [AGGREGATE BASE COURSE] - SPREADING, WATERING AND COMPACTING GRADED 37.5 MM AGGREGATE TO FORM A DENSE AGGREGATE BASE USING MACHINERY INCLUDING MOTOR GRADER & ROLLER HIRE CHARGES. TRANSPORT OF AGGREGATES TO BE PAID SEPARATELY (LOOSE VOLUME)[SSCM 405.1 TO 4]:						
	DATA FOR	170.00	CU.M				
	LABOUR S/SK - BLINDING & RAKING	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				80.00		
	GRADED AGGREGATE 37.5	170.00	CU.M	B0-313	374,000.00		
	MOTOR GRADER (120-140 HP)	6.00	HOURS	B0-114	32,871.62		
	ROLLER CHARGES (VIBRATING 10 TONS)	1.00	DAY	B0-110	33,843.83		
	HIRE OF WATER BOWSER (6000 LTRS)	0.25	DAY	B0-128	2,600.00		
					446,595.45		
	COST PER 170 CU.M				446,595.45		
	RATE PER 1 CU.M (LOOSE VOLUME)			M1-012A	2,627.03		
				SAY	2,627.05	18.82	2,608.23
	IF THE AGGREGATE WAS NOT PILED AND MEASURED PRIOR TO SPREADING, PILING COST OF AGGREGATE AS PER A1-018 SHALL BE DEDUCTED.						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
M1-013	DENSE GRADED AGGREGATE BASE [AGGREGATE BASE COURSE] SPREADING WATERING AND COMPACTING GRADED 37.5 MM AGGREGATE TO FORM A DENSE AGGREGATE BASE IN STRIPS, AVERAGE WIDTH NOT EXCEEDING 1.2 METERS, FOR ROAD WIDENING. EXCLUDING TRANSPORT OF AGGREGATES * (LOOSE VOLUME)[SSCM 405.1]:						
	DATE FOR 19.82 CU.M						
	LABOUR (S/SK)-SPREADING	5.50	DAYS	B0-003	8,800.00		
	LABOUR (S/SK)-BLINDING	0.50	DAY	B0-003	800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				240.00		
	GRADED AGGREGATE 37.5 MM	19.82	CU.M	B0-313	43,608.18		
	ROLLER CHARGES ETC.(8-10 TONS)	1.24	DAY	B0-111	15,652.65		
	HIGHER OF TRACTOR & TRAILER	0.22	DAY	B0-117	1,415.26		
	HIRE OF WATER TANK AND PUMP (50 MM)	0.22	DAY	B0-104	279.85		
					70,795.93		
	COST PER 19.82 CU.M				70,795.93		
	RATE PER 1 CU.M (LOOSE VOLUME)*			M1-013	3,571.94		
				SAY	3,571.95	484.36	3,087.59
	* NOTE FOR THE RATE ON COMPACTED VOLUME, INCREASE LOOSE VOLUME RATE BY 42%.						
	IF THE AGGREGATE WAS NOT PILED AND MEASURED PRIOR TO SPREADING, PILING COST OF AGGREGATE AS PER A1-018 SHALL BE DEDUCTED.						
	NOTE* THE ITEM M1-013 ON MANUAL LABOUR SHOULD BE ADOPTED ON APPROVAL BY PD / CE FOR SMALL WORKS ONLY. WHEN MACHINERY IS USED FOR SPREADING AND COMPACTION, M1-012A / M1-013A SHALL BE ADOPTED DEPENDING ON SITE SITUATION.						
M1-013A	GRADED 37.5 AGGREGATE BASE COURSE MATERIAL SPREAD & ROLLED IN STRIPS, AVERAGE WIDTH NOT EXCEEDING 1.2 METERS USING MACHINERY INCLUDING MOTOR GRADER & ROLLER HIRE CHARGES, FUEL & WATERING (LOOSE VOLUME)* [SSCM 405.1 TO 4] : TRANSPORT OF AGGREGATES TO BE PAID SEPARATELY						
	DATA FOR 100 CU.M						
	LABOUR S/SK - BLINDING & RAKING	2.00	DAY	B0-003	3,200.00		
	LABOUR U/SK	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				80.00		
	GRADED AGGREGATE 37.5	100.00	CU.M	B0-313	220,000.00		
	MOTOR GRADER (65 HP)	1.00	DAY	B0-113	26,193.73		
	ROLLER CHARGES (1/2 TO 1 TON)	3.00	DAY	B0-109	21,050.19		
	HIRE OF WATER BOWSER (6000 LTRS)	0.13	DAY	B0-128	1,300.00		
					273,351.26		
	COST PER 100 CU.M				273,351.26		
	RATE PER 1 CU.M (LOOSE VOLUME)*			M1-013A	2,733.51		
				SAY	2,733.50	47.27	2,686.23
	* NOTE FOR THE RATE ON COMPACTED VOLUME, INCREASE LOOSE VOLUME RATE BY 42%.						
	IF THE AGGREGATE WAS NOT PILED AND MEASURED PRIOR TO SPREADING, PILING COST OF AGGREGATE AS PER A1-018 SHALL BE DEDUCTED.						

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION VII =====							
ROAD SURFACE TREATMENT -----							
(SAND TRANSPORT UP TO 16 KM INCLUDED IN THE RATES. TRANSPORT OF BITUMEN EMULSION / BITUMEN TO BE PAID SEPARATELY.) -----							
S1-001	BITUMEN(80/100) SURFACING FIRST COAT USING 2 LTR/SQ.M INCLUDING BLINDING WITH SAND AT THE RATE OF 125 SQ.M/CU.M [SSCM 503.1] :						
	DATA FOR 372 SQ.M -----						
	LABOUR (S/SK)/CLEARING SURFACE	9.00	DAYS	B0-003	14,400.00		
	LABOUR (U/SK)/TRANSPORT SAND	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				379.09		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	744.00	LTR	B0-351	63,984.00		
	SAND	2.98	CU.M	B0-331	11,904.00		
	FIREWOOD	0.38	CU.M	B0-395	574.46		
	BASKETS	0.33	NO	B0-631	86.67		

					92,191.89		

	COST PER 372 SQ.M				92,191.89		
	RATE PER 1 SQ.M			S1-001	247.83		
					=====		
				SAY	247.85	40.76	207.09
S1-002	BITUMEN(80/100) SURFACING FIRST COAT, USING 2 LTR/SQ.M, INCLUDING BLINDING WITH GRAVEL WHERE SAND IS NOT AVAILABLE WITHIN 16 KM. :						
	DATA FOR 372 SQ.M -----						
	LABOUR (S/SK)	9.00	DAYS	B0-003	14,400.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				379.09		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	744.00	LTR	B0-351	63,984.00		
	GRAVEL	4.70	CU.M	E1-008	6,753.15		
	FIREWOOD	0.38	CU.M	B0-395	574.46		
	BASKETS	0.33	NO	B0-631	86.67		

					87,041.04		

	COST PER 372 SQ.M				87,041.04		
	RATE PER 1 SQ.M			S1-002	233.98		
					=====		
				SAY	234.00	40.76	193.24

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-003	DOUBLE BITUMINOUS SURFACE TREATMENT WITH HOT BITUMEN (MANUAL) INCLUDING INTERNAL TRANSPORT (BINDER AND AGGREGATE PAID SEPARATELY) [SSCM 505b.1 - 505b.5 & TABLE 505b-1]:						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK)/CLEARING SURFACE ETC.	3.50	DAYS	B0-004	5,345.69		
	LABOUR (S/SK)-APPLY. 1ST COAT BITU.	2.00	DAYS	B0-003	3,200.00		
	LABOUR (S/SK)-SPR.MAT/CONT.VEHICLES	1.75	DAYS	B0-003	2,800.00		
	LABOUR (U/SK)-BRUSHING	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				302.73		
	FIREWOOD	0.25	CU.M	B0-395	382.98		
	BASKETS	0.67	NO	B0-631	174.20		
	HIRE OF TAR BOILER	1.00	DAY	B0-101	100.00		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	4.00	HOURS	B0-112	18,969.16		
	LABOUR (S/SK)-APPLY. 2ND COAT	2.00	DAYS	B0-003	3,200.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	LABOUR (S/SK)	0.75	DAY	B0-003	1,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				148.18		
	HIRE OF TAR BOILER	1.00	DAY	B0-101	100.00		
	FIREWOOD	0.19	CU.M	B0-395	287.23		
	BASKETS	0.67	NO	B0-631	173.33		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	4.00	HOURS	B0-112	18,969.16		
	TRACTOR & TRAIL.(1 & 2 COATS)	1.00	DAY	B0-117	6,432.98		
					64,076.65		
	COST PER 279 SQ.M				64,076.65		
	PER 1 SQ.M			S1-003	229.67		
				SAY	229.65	64.65	165.00
S1-004	SINGLE BITUMINOUS SURFACE TREATMENT WITH HOT BITUMEN (MANUAL) INCLUDING INTERNAL TRANSPORT (BINDER AND AGGREGATE PAID SEPARATELY) [SSCM 505b.1 - 505b.5 & TABLE 505b-1]:						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK)/CLEARING SURFACE & SWEEP ROAD ETC.	3.00	DAYS	B0-004	4,582.02		
	LABOUR (S/SK)/APPLY. BITUMEN	2.00	DAYS	B0-003	3,200.00		
	LABOUR (S/SK)/SPREADING	1.00	DAY	B0-003	1,600.00		
	LABOUR (S/SK) - BRUSH. & CONT.VEHI	0.50	DAY	B0-003	800.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				254.55		
	FIREWOOD	0.38	CU.M	B0-395	574.46		
	BASKETS	0.67	NO	B0-631	173.33		
	HIRE OF TAR BOILER	1.00	DAY	B0-101	100.00		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	4.00	HOURS	B0-112	18,969.16		
	TRACTOR & TRAILER	0.50	DAY	B0-117	3,216.49		
					33,470.02		
	COST PER 279 SQ.M				33,470.02		
	PER 1 SQ.M			S1-004	119.96		
				SAY	119.95	36.49	83.46

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-005	DOUBLE BITUMINOUS SURFACE TREATMENT WITH EMULSION(CRS-2)(MANUAL) INCLUDING INTERNAL TRANSPORT (BINDER AND AGGREGATE PAID SEPARATELY):						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK)/CLEARING ETC.	3.50	DAYS	B0-004	5,345.69		
	LABOUR (S/SK)-APPLY. 1ST COAT EMUL.	2.00	DAYS	B0-003	3,200.00		
	LABOUR (S/SK)-SPR.MAT/CONT.VEHICLES	1.75	DAYS	B0-003	2,800.00		
	LABOUR (U/SK)/BRUSH	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL BASKETS				302.73		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	0.67	NO	B0-631	173.33		
	2ND COAT:	4.00	HOURS	B0-112	18,969.16		
	LABOUR (S/SK)/EMULSION	2.00	DAYS	B0-003	3,200.00		
	LABOUR (U/SK)/SCREENING	1.00	DAY	B0-004	1,527.34		
	LABOUR (S/SK)/SPREADING	0.75	DAY	B0-003	1,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOL BASKETS				148.18		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	0.67	NO	B0-631	173.33		
	TRACTOR & TRAILER (1ST & 2ND COAT)	4.00	HOURS	B0-112	18,969.16		
		1.00	DAY	B0-117	6,432.98		
					63,205.58		
	COST PER 279 SQ.M				63,205.58		
	PER 1 SQ.M			S1-005	226.54		
				SAY	226.55	64.65	161.90
S1-006	SINGLE BITUMINOUS SURFACE TREATMENT WITH EMULSION(CRS-2)(MANUAL) INCLUDING INTERNAL TRANSPORT (BINDER AND AGGREGATE PAID SEPARATELY):						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK)/CLEANING SURFACE ETC.	3.00	DAYS	B0-004	4,582.02		
	LABOUR (S/SK)/APPLY EMULSION	2.00	DAYS	B0-003	3,200.00		
	LABOUR (S/SK)/SPREADING	1.00	DAY	B0-003	1,600.00		
	LABOUR (S/SK) - BRUSH. & CONT.VEHI	0.50	DAY	B0-003	800.00		
	ALLOW 2.5% ON LABOUR FOR TOOL BASKETS				254.55		
	HIRE OF PNEUM. ROLLER (MINIMUM 4 HRS/DAY)	0.67	NO	B0-631	173.33		
	TRACTOR & TRAILER	4.00	HOURS	B0-112	18,969.16		
		0.50	DAY	B0-117	3,216.49		
					32,795.55		
	COST PER 279 SQ.M				32,795.55		
	PER 1 SQ.M			S1-006	117.55		
				SAY	117.55	36.49	81.06

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-007	BITUMEN(80/100) SURFACING SUBSEQUENT COAT USING 0.75 LTR/SQ.M INCLUDING BLINDING WITH SAND @ 125 SQ.M/CU.M [SSCM 503.1 (b)] :						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)/BITUMEN & BLINDING	5.50	DAYS	B0-003	8,800.00		
	LABOUR (U/SK)/INT.TRANSPORT/SAND	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				239.09		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	279.00	LTR	B0-351	23,994.00		
	SAND	2.98	CU.M	B0-331	11,904.00		
	FIREWOOD	0.25	CU.M	B0-395	379.15		
	BASKETS	0.33	NO	B0-631	86.67		
					46,266.57		
	COST PER 372 SQ.M				46,266.57		
	PER 1 SQ.M			S1-007	124.37		
				SAY	124.35	25.71	98.64
S1-008	BITUMEN(80/100) SURFACING 2ND/SUBSEQUENT COAT USING 1.0 LTR/SQ.M INCLUDING BLINDING AT THE RATE OF 125 SQ.M/CU.M (NEW WORK)[SSCM 503.1(b)] :						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)	5.50	DAYS	B0-003	8,800.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				239.09		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	372.00	LTR	B0-351	31,992.00		
	SAND	2.98	CU.M	B0-331	11,904.00		
	FIREWOOD	0.25	CU.YD	B0-395	379.15		
	BASKETS	0.33	NO	B0-631	86.67		
					54,264.57		
	COST PER 372 SQ.M				54,264.57		
	PER 1 SQ.M			S1-008	145.87		
				SAY	145.85	25.71	120.14
S1-009	BITUMEN(80/100) SURFACING SUBSEQUENT COAT USING 0.75 LTR/SQ.M INCLUDING BLINDING WITH GRAVEL FREE OF CLAY WHERE SAND IS NOT AVAILABLE WITHIN 16 KM [SSCM 503.2(b)]:						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)	5.50	DAYS	B0-003	8,800.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				239.09		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	279.00	LTR	B0-351	23,994.00		
	GRAVEL	4.72	CU.M	E1-008	6,780.27		
	FIREWOOD	0.25	CU.M	B0-395	379.15		
	BASKETS	0.33	NO	B0-631	86.67		
					41,142.84		
	COST PER 372 SQ.M				41,142.84		
	PER 1 SQ.M			S1-009	110.60		
				SAY	110.60	25.71	84.89

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-010	BITUMEN(80/100) SURFACING 2ND/SUBSEQUENT COAT USING 1 LTR/SQ.M INCLUDING BLINDING WITH GRAVEL FREE OF CLAY WHERE SAND IS NOT AVAILABLE WITHIN 16 KM (NEW WORK) [SSCM 503.3(c)] :						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)	5.50	DAYS	B0-003	8,800.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				239.09		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	372.00	LTR	B0-351	31,992.00		
	GRAVEL	4.72	CU.M	E1-008	6,780.27		
	FIREWOOD	0.25	CU.M	B0-395	379.15		
	BASKETS	0.33	NO	B0-631	86.67		
					49,140.84		
	COST PER 372 SQ.M				49,140.84		
	PER 1 SQ.M			S1-010	132.10		
				SAY	132.10	25.71	106.39
S1-011	BITUMEN EMULSION(CRS-1) SURFACE TREATMENT 1ST COAT WITH 3.5 LTR/SQ.M INCLUDING BLINDING WITH SAND, @ 125 SQ.M/CU.M (MANUAL):						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)-BITUMEN & BLINDING	5.00	DAYS	B0-003	8,000.00		
	LABOUR (U/SK)-INT. TRANSPORT/SAND	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				219.09		
	EMULSION (CRS-1)	1,302.00	LTR	B0-353	122,622.36		
	SAND	2.98	CU.M	B0-331	11,904.00		
	BASKETS	0.33	NO	B0-631	86.67		
					143,595.79		
	COST PER 372 SQ.M				143,595.79		
	PER 1 SQ.M			S1-011	386.01		
				SAY	386.00	23.56	362.44
S1-012	BITUMEN EMULSION(CRS-1) SURFACE TREATMENT 1ST COAT WITH 3.5 LTR/SQ.M (USING TROLLEY, EMULSION), INCLUDING BLINDING WITH SAND, @ 125 SQ.M/CU.M :						
	DATA FOR 650 SQ.M						
	LABOUR (S/SK)-BITUMEN & BLINDING	3.50	DAYS	B0-003	5,600.00		
	LABOUR (U/SK)-INT. TRANSPORT/SAND	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				159.09		
	EMULSION (CRS-1)	2,275.00	LTR	B0-353	214,259.50		
	SAND	5.20	CU.M	B0-331	20,800.00		
	BASKETS	0.58	NO	B0-631	151.67		
	HIRE OF TROLLEY, EMULSION	1.00	DAY	B0-137	920.40		
					242,654.33		
	COST PER 650 SQ.M				242,654.33		
	PER 1 SQ.M			S1-012	373.31		
				SAY	373.30	9.79	363.51

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-013	BITUMEN EMULSION(CRS-1) SURFACE TREATMENT SUBSEQUENT COAT USING 0.75 LTR/SQ.M, INCLUDING BLINDING WITH SAND @ 125 SQ.M/CU.M (MANUAL)						
	DATA FOR 372 SQ.M						
	LABOUR (S/SK)-BITUMEN & BLINDING	2.00	DAYS	B0-003	3,200.00		
	LABOUR (U/SK)-INT. TRANSPORT/SAND	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				99.09		
	EMULSION (CRS-1)	279.00	LTR	B0-353	26,276.22		
	SAND	2.98	CU.M	B0-331	11,904.00		
	BASKETS	0.33	NO	B0-631	86.67		
					42,329.65		
	COST PER 372 SQ.M				42,329.65		
	PER 1 SQ.M			S1--013	113.79		
				SAY	113.80	10.66	103.14
S1-014	BITUMEN EMULSION(CRS-1) SURFACE TREATMENT SUBSEQUENT COAT WITH 0.75 LTR/SQ.M (USING TROLLEY, EMULSION), INCLUDING BLINDING WITH SAND @ 125 SQ.M/CU.M						
	DATA FOR 1,115 SQ.M						
	LABOUR (S/SK)-BITUMEN & BLINDING	2.00	DAYS	B0-003	3,200.00		
	LABOUR (U/SK)-INT. TRANSPORT/SAND	1.50	DAY	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOL				137.28		
	EMULSION (CRS-1)	836.25	LTR	B0-353	78,758.03		
	SAND	8.92	CU.M	B0-331	35,680.00		
	BASKETS	1.00	NO	B0-631	260.00		
	HIRE OF TROLLEY, EMULSION	1.72	DAYS	B0-137	1,583.09		
					121,909.40		
	COST PER 1,115 SQ.M				121,909.40		
	PER 1 SQ.M			S1-014	109.34		
				SAY	109.35	4.92	104.43

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-015	TACK COAT USING BITUMEN EMULSION(CSS-1) @ THE RATE OF 0.5 LTR/SQ.M INCLUSIVE OF BRUSHING, CLEANING ROAD SURFACE AND COST OF BITUMEN EMULSION (MANUAL) [SSCM 502.3]:						
(1)	DATA FOR 372 SQ.M - TACK COAT						
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOL EMULSION (CSS-1)	186.00	LTR	B0-352	80.00 17,363.10		
					20,643.10		
	COST PER 372 SQ.M				20,643.10		
	PER 1 SQ.M			S1-015.1	55.49		
(2)	DATA FOR 232 SQ.M - FOR BRUSHING						
	LABOUR (U/SK)	0.75	DAY	B0-004	1,145.51		
	ALLOW 2.5% ON LABOUR FOR TOOL				28.64		
					1,174.14		
	COST PER 232 SQ.M				1,174.14		
	PER 1 SQ.M			S1-015.2	5.06		
	RATE PER 1 SQ.M (1 + 2)			S1-015	60.55		
				SAY	60.55	13.54	47.01
S1-016	TACK COAT USING BITUMEN EMULSION(CSS-1) @ THE RATE OF 0.5 LTR/SQ.M INCLUSIVE OF BRUSHING, CLEANING ROAD SURFACE AND COST OF BITUMEN EMULSION (MANUAL) [SSCM 502.3]:						
	AS PER S1-015, COST PER 186 LITRES				22,524.60		
	RATE PER 1 LITRE			S1-016	121.10		
				SAY	121.10	27.08	94.02
S1-017	TACK COAT USING BITUMEN EMULSION(CSS-1) @ THE RATE OF 0.75 LTR/SQ.M INCLUSIVE OF BRUSHING, CLEANING ROAD SURFACE AND COST OF BITUMEN EMULSION (MANUAL) [SSCM 502.1-503.3]:						
(1)	DATA FOR 372 SQ.M - TACK COAT						
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOL EMULSION (CSS-1)	279.00	LTR	B0-352	80.00 26,044.65		
					29,324.65		
	COST PER 372 SQ.M				29,324.65		
	PER 1 SQ.M			S1-017.1	78.83		
(2)	FOR BRUSHING AND CLEANING	1.00	SQ.M	S1-015.2	5.06		
	RATE PER 1 SQ.M (1 + 2)			S1-017	83.89		
				SAY	83.90	13.54	70.36

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-018	TACK COAT WITH CUT BACK BITUMEN(MC 30) USING 0.5 LTR/SQ.M. INCLUDING BRUSHING AND CLEANING ROAD SURFACE (MANUAL):						
(1)	DATA FOR 372 SQ.M - TACK COAT						
	LABOUR (S/SK)	5.00	DAYS	B0-003	8,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				200.00		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	130.20	LTR	B0-351	11,197.20		
	KEROSENE OIL	55.80	LTR	B0-601	6,138.00		
	FIREWOOD	0.25	CU.M	B0-395	379.15		
	BASKETS	0.33	NO	B0-631	86.67		
					26,101.01		
	COST PER 372 SQ.M				26,101.01		
	PER 1 SQ.M			S1-018.1	70.16		
(2)	FOR BRUSHING AND CLEANING	1.00	SQ.M	S1-015.2	5.06		
	RATE PER 1 SQ.M (1 + 2)			S1-018	75.22		
				SAY	75.20	26.44	48.76
S1-019	DELETED						
S1-020	TACK COAT WITH CUT BACK BITUMEN(80/100) USING 0.75 LTR/SQ.M INCLUDING BRUSHING AND CLEANING ROAD SURFACE (MANUAL)[SSCM 502.4] :						
(1)	DATA FOR 372 SQ.M - TACK COAT						
	LABOUR (S/SK)	5.00	DAYS	B0-003	8,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				200.00		
	TAR BOILER	1.00	DAYS	B0-101	100.00		
	BITUMEN	195.30	LTR	B0-351	16,795.80		
	KEROSENE OIL	83.70	LTR	B0-601	9,207.00		
	FIREWOOD	0.33	CU.M	B0-395	495.87		
	BASKETS	0.33	NO	B0-631	86.67		
					34,885.34		
	COST PER 372 SQ.M				34,885.34		
	PER 1 SQ.M			S1-020.1	93.78		
(2)	FOR BRUSHING AND CLEANING	1.00	SQ.M	S1-315.2	5.06		
	RATE PER 1 SQ.M (1 + 2)			S1-020	98.84		
				SAY	98.85	26.44	72.41

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-021	ROLLING OVER BLINDING MATERIAL SPREAD OVER SUBSEQUENT BITUMEN SURFACING USING DIESEL ROLLER (8-10 TONS) [SSCM 502.4:						
	DATA FOR ROLLING 1115 SQ.M						
	HIRE OF ROLLER(8-10 TONS)	1.00	DAY	B0-111	12,635.84		
	COST PER 1115 SQ.M				12,635.84		
	RATE PER 1 SQ.M			S1-021	11.33		
				SAY	11.35	0.00	11.35
S1-022	PRIME COAT WITH BITUMEN EMULSION(CSS-1) USING 1 LTR/SQ.M INCLUDING BLINDING WITH SAND AT THE RATE OF 250 SQ.M/CU.M AND BRUSHING CLEANING AND MOISTENING ROAD SURFACE :						
(1)	DATA FOR 372 SQ.M - PRIME COAT						
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOL				99.09		
	EMULSION (CSS-1)	372.00	LTR	B0-352	34,726.20		
	SAND	1.49	CU.M	B0-331	5,952.00		
	BASKETS	0.33	NO	B0-631	86.67		
					44,827.63		
	COST PER 372 SQ.M				44,827.63		
	PER 1 SQ.M			S1-022.1	120.50		
(2)	DATA FOR 232 SQ.M - BRUSHING, CLEANING AND MOISTENING ROAD SURFACE (MANUAL)						
	LABOUR (U/SK)	0.75	DAY	B0-004	1,145.51		
	ALLOW 2.5% ON LABOUR FOR TOOLS				28.64		
	ALLOW FOR WATER	1.00	ITEM	B0-786	71.10		
					1,245.24		
	COST PER 232 SQ.M				1,245.24		
	PER 1 SQ.M			S1-022.2	5.37		
	RATE PER 1 SQ.M (1 + 2)			S1-022	125.87		
				SAY	125.85	15.59	110.26

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-023	PRIME COAT WITH BITUMEN EMULSION(CSS-1) USING 1 LTR/SQ.M WITHOUT BLINDING, BUT INCLUSIVE OF BRUSHING, CLEANING AND MOISTENING ROAD SURFACE :						
(1)	DATA FOR 372 SQ.M - PRIME COAT						
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOL				80.00		
	EMULSION (CSS-1)	372.00	LTR	B0-352	34,726.20		
					38,006.20		
	COST PER 372 SQ.M				38,006.20		
	PER 1 SQ.M			S1-023.1	102.17		
(2)	FOR BRUSHING, CLEANING AND MOISTENING	1.00	SQ.M	S1-022.2	5.37		
	RATE PER 1 SQ.M (1 + 2)	1.00	SQR	S1-023	107.53		
				SAY	107.55	13.54	94.01
S1-024	PRIME COAT WITH CUT BACK BITUMEN(MC 30) USING 1 LTR/SQ.M INCLUDING BLINDING WITH SAND AT THE RATE OF 250 SQ.M/CU.M AND BRUSHING, CLEANING AND MOISTENING ROAD SURFACE:						
(1)	DATA FOR 372 SQ.M - PRIME COAT						
	LABOUR (S/SK)	5.00	DAYS	B0-003	8,000.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOLS				219.09		
	TAR BOILER	1.00	DAY	B0-101	100.00		
	BITUMEN	260.40	LTR	B0-351	22,394.40		
	KEROSENE OIL	111.60	LTR	B0-601	12,276.00		
	FIREWOOD	0.66	CU.M	B0-395	991.75		
	BASKETS	0.33	NO	B0-631	86.67		
	SAND	1.49	CU.M	B0-331	5,952.00		
					50,783.58		
	COST PER 372 SQ.M				50,783.58		
	PER 1 SQ.M			S1-024.1	136.51		
(2)	FOR BRUSHING, CLEANING AND MOISTENING	1.00	SQ.M	S1-022.2	5.37		
	RATE PER 1 SQ.M (1 + 2)			S1-024	141.88		
				SAY	141.90	28.50	113.40

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-025	PRIME COAT WITH CUT BACK BITUMEN(MC 30) USING 1 LT/SQ.M WITHOUT BLINDING BUT INCLUSIVE OF BRUSHING, CLEANING, AND MOISTENING ROAD SURFACE.:						
(1)	DATA FOR 372 SQ.M - PRIME COAT						
	LABOUR (S/SK)	5.00	DAYS	B0-003	8,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				200.00		
	TAR BOILER	1.00	DAYS	B0-101	100.00		
	BITUMEN	260.40	LTR	B0-351	22,394.40		
	KEROSENE OIL	111.60	LTR	B0-601	12,276.00		
	FIREWOOD	0.50	CU.M	B0-395	758.29		
					43,728.69		
	COST PER 372 SQ.M				43,728.69		
	PER 1 SQ.M			S1-025.1	117.55		
(2)	FOR BRUSHING, CLEANING AND MOISTENING	1.00	SQ.M	S1-022.2	5.37		
	RATE PER 1 SQ.M (1 + 2)			S1-025	122.92		
				SAY	122.90	26.44	96.46
S1-026	SWEEPING OVER TARRED SURFACE TO ARREST BLEEDING :						
	DATA FOR 372 SQ.M						
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.18		
	BASKETS	0.17	NO	B0-631	43.33		
					1,608.86		
	COST PER 372 SQ.M				1,608.86		
	PER 1 SQ.M			S1-026	4.32		
				SAY	4.30	4.11	0.19

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CODE -----	DESCRIPTION OF ITEM -----	QUANTITY -----	UNIT -----	PRICE CODE -----	AMOUNT (Rs.) -----	LABOUR INPUT -----	OTHER INPUTS -----
S1-027	APPLICATION OF BITUMEN EMULSION FOR SURFACE TREATMENT USING CRS - 1 (USING PLANT) "RATE PER LITRE"						
	DATA FOR 4546 LITRES -----						
	CRS 1 AT SITE	4,546.00	LTR	B0-353	428,142.28		
	MECHANICAL BROOM WITH TRACTOR	0.63	DAY	B0-122	7,369.61		
	EMULSION DISTRIBUTOR - 4000 LITRES	1.00	DAY	B0-123	26,739.12		
	LABOUR (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (SK/B)	2.00	DAY	B0-002	3,400.00		
	LABOUR (U/SK)	6.00	DAY	B0-004	9,164.04		

					476,715.05		

	COST PER 4546 LTRES				476,715.05		
	RATE PER 1 LITRE			S1-027	104.86		
					=====		
				SAY	104.85	3.18	101.67
S1-028	BLINDING THE BITUMEN SURFACING WITH SAND AT THE RATE OF 125 SQ.M PER 1 CU.M USING MATERIAL FROM STOCK PILE:						
	DATA FOR 3000 SQ.M -----						
	SAND	24.00	CU.M	B0-331	96,000.00		
	TRACTOR	1.00	DAY	B0-117	6,432.98		
	LABOUR (U/SK) - LOADING & SPREADING	7.00	DAY	B0-004	10,691.38		
	ALLOW 2.5% ON LABOUR FOR TOOLS				267.28		

					113,391.64		

	FOR 3000 SQ.M				113,391.64		
	RATE PER 1 SQ.M			S1-028	37.80		
					=====		
				SAY	37.80	3.56	34.24
S1-029	SINGLE BITUMINOUS SURFACE TREATMENT WITH BITUMEN EMULSION(CRS-2) USING PLANT. (BINDER AND AGGREGATE PAID SEPARATELY) (RATE TO INCLUDE TRANSPORT COST OF AGGREGATE UP TO 16 KMS) [SSCM 505.3(d)]:						
	DATA FOR 2787 SQ.M. -----						
	PLANT (WET LEASE) -----						
	MECHANICAL BROOM WITH TRACTOR	0.75	DAY	B0-122	8,843.54		
	EMULSION SPRAYER SELF PROPELLED (4000 LTRS)	1.00	DAY	B0-123	26,739.12		
	CHIPS SPREADER(SELF PROPELLED)	1.00	DAY	B0-121	39,002.17		
	ROLLER,SMOOTH WHEEL (7 TON) - 8 HOURS	8.00	HRS	B0-135	21,530.40		
	PNEUMATIC ROAD ROLLER	1.00	DAY	B0-112	37,938.32		
	BACKHOE LOADER	1.00	DAY	B0-115	25,006.78		
	TIPPER (7 TON/4.5 CU.M.) 1 NO. (ASSUMING 16 KM AVE. TRANSPORT FOR 9 TRIPS)	648.00	CU.M/KM	B0-118	17,470.08		
	LABOUR (SK/A)	2.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	12.00	DAY	B0-003	19,200.00		

					199,530.41		

	COST FOR 2787 SQ.M				199,530.41		
	RATE PER 1 SQ.M			S1-029	71.59		
					=====		
				SAY	71.60	8.25	63.35

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-030	DOUBLE BITUMINOUS SURFACE TREATMENT WITH BITUMEN EMULSION(CRS-1) USING PLANT. (BINDER AND AGGREGATE PAID SEPARATELY) (RATE TO INCLUDE TRANSPORT COST OF AGGREGATE UP TO 16 KMS) [SSCM 505.3(e)]:						
	DATA FOR 1394 SQ.M						
	PLANT (WET LEASE)						
	MECHANICAL BROOM WITH TRACTOR	0.75	DAY	B0-122	8,843.54		
	EMULSION SPRAYER SELF PROP. (4000 LTRS)	1.00	DAY	B0-123	26,739.12		
	CHIP SPREADER (SELF PROPELLED)	1.00	DAY	B0-121	39,002.17		
	WHEEL LOADER (1.7 CU.M)	0.75	DAY	B0-116A	23,289.02		
	ROLLER,SMOOTH WHEEL (7 TON) - 8 HOURS.	8.00	HRS	B0-135	21,530.40		
	PNEUMATIC ROAD ROLLER	1.00	DAY	B0-112	37,938.32		
	TIPPERS (7 TON/4.5 CU.M.) 2 NOS. (ASSUMING 16 KM AVE. TRANS., 6 TRIPS EACH TIPPER)	864.00	CU.M/KM	B0-118	23,293.44		
	LABOUR (SK/A)	2.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	12.00	DAY	B0-003	19,200.00		
					203,636.01		
	COST FOR 1394 SQ.M				203,636.01		
	RATE PER 1 SQ.M			S1-030	146.08		
				SAY	146.10	16.50	129.60
S1-030A	DELETED						

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-030B	DOUBLE BITUMINOUS SURFACE TREATMENT WITH HOT BITUMEN(80/100) USING 19 MM AND 9.5 MM SINGLE SIZE SELECTED AGGREGATES ON EXISTING BITUMINOUS SURFACES USING PLANT. RATE TO INCLUDE ALL LABOUR, MATERIAL, PLANT AND TRANSPORT COST OF AGGREGATE UP TO 16 KM. (TRANSPORT OF BINDER AND ADDITIONAL TRANSPORT OF AGGREGATE TO BE PAID SEPARATELY)[SSCM 505b.5(e)]:						
	DATA FOR	1,394	SQ.M				
	PLANT (WET LEASE)						
	MECHANICAL BROOM WITH TRACTOR	0.75	DAY	B0-122	8,843.54		
	BITUMEN DISTRIBUTER 4500 LTR (ANNEX -1 TABLE -10)	6.00	HRS	*	0.00		
	CHIP SPREADER (SELF PROPELLED)	1.00	DAY	B0-121	39,002.17		
	WHEEL LOADER (1.7 CU.M)	0.75	DAY	B0-116A	23,289.02		
	ROLLER,SMOOTH WHEEL (7 TON) - 8 HOURS.	8.00	HRS	B0-135	21,530.40		
	PNEUMATIC ROAD ROLLER	1.00	DAY	B0-112	37,938.32		
	TIPPERS (7 TON/4.5 CU.M.) 2 NOS. (ASSUMING 16 KM AVE. TRANS., 6 TRIPS EACH TIPPER)	864.00	CU.M/KM	B0-118	23,293.44		
	ALLOW FOR HEATING BITUMEN, TANKER 10,000 LITRE, IDLE HIRE (WET)	1.00	HRS	B0-141	4,582.45		
	MATERIALS						
	BINDER 80/100 BITUMEN FOR 1ST SEAL @ THE RATE OF 0.75 LITRE/SQ.M	1,045.50	LTR	B0-355	92,004.00		
	19 MM AGGREGATE FOR 1ST SEAL @ THE RATE OF 1.5 CU.M/100 SQ.M	20.91	CU.M	B0-314	48,026.51		
	BINDER 80/100 BITUMEN FOR 2ND SEAL @THE RATE OF 1.2 LITRE/SQ.M	1,672.80	LTR	B0-355	147,206.40		
	12.5 MM AGGREGATE FOR 2ND SEAL @ THE RATE OF 0.85 CU.M/100 SQ.M	11.85	CU.M	B0-315	29,308.50		
	LABOUR						
	LABOUR (SK/A)	2.00	DAY	B0-001	3,800.00		
	LABOUR (S/SK)	12.00	DAY	B0-003	19,200.00		
	COST FOR 1394 SQ.M				498,024.75		
	RATE PER 1 SQ.M			S1-030	357.26		
				SAY	357.25	16.50	340.75
	* (SEE APPROVED MACHINERY HIRE CHARGES LIST - TABLE 10)						
	QUANTITIES OF AGGREGATES AND BINDER (PEN GRADE BITUMEN) FOR DBST [SSCM 505.3]						
		AGGREGATE	BINDER				
		CU.M/100 M ²	LTR/SQ.M				
	1ST SEAL 20 MM AGGREGATE - BINDER PENGRADE BITUMEN	1.3 - 1.7	0.65-0.85				
	2ND SEAL 10 MM AGGREGATE - BINDER PENETRATION GRADE BITUMEN	0.7-1.0	1.0-1.3				
	1ST SEAL 14 MM AGGREGATE - BINDER PENGRADE BITUMEN	1.0 - 1.3	0.5-0.7				
	2ND SEAL 6.3 MM AGGREGATE - BINDER PENETRATION GRADE BITUMEN	0.55-0.75	0.75-1.05				

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-031	SUPPLY, LAY AND COMPACT ASPHALT CONCRETE (19 MM, 60/70 BINDER 4.7%**) - DENSE (PLANT MADE) IN WEARING SURFACE OF SMALL WORKS SUCH AS BRIDGE DECKING, REINSTATEMENT OF TRENCHES ETC. (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY.) [SSCM - 506]:						
	** (FOR BINDER CONTENTS SEE GENERAL NOTES - SECTION 29.8)						
	DATA FOR 10 METRIC TONS						
	LABOUR (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	2.00	DAY	B0-004	3,054.68		
	LABOUR (S/SK)	4.00	DAY	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				283.87		
	ASPHALT PREMIX CONCRETE(WEARING)	10.00	M.T.	B0-361A	0.00		
	ROAD ROLLER (7 HOURS)	0.88	DAY	B0-111	11,056.36		
					22,694.91		
	COST FOR 10 M.T.				22,694.91		
	RATE PER 1 M.T.			S1-031	2,269.49		
				SAY	2,269.50	1,135.47	1,134.03
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						
S1-032	LAY AND COMPACT ASPHALT CONCRETE (37.5MM, 60/70 BINDER, 3.5% **) - BOUND BASE MATERIAL (PLANT MADE) IN SMALL WORKS SUCH AS BRIDGE DECKING, REINSTATEMENT OF TRENCHES ETC. (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY.) [SSCM - 506]:						
	** (FOR BINDER CONTENTS SEE GENERAL NOTES - SECTION 29.8)						
	DATA FOR 10 METRIC TONS						
	LABOUR (SK A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	2.00	DAY	B0-004	3,054.68		
	LABOUR (S/SK)	4.00	DAY	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				283.87		
	ASPHALT BOUND PREMIX BASE MATERIAL	10.00	M.T.	B0-362	0.00		
	ROAD ROLLER (7 HOURS)	0.88	DAY	B0-111	11,056.36		
					22,694.91		
	COST FOR 10 M.T.				22,694.91		
	RATE PER 1 M.T.			S1-032	2,269.49		
				SAY	2,269.50	1,135.47	1,134.03
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-033	SUPPLY, LAY AND COMPACT CUTBACK ASPHALT CONCRETE COLD MIX WITH MC30 (19 MM AGGREGATE, 15% CUT BACK 60/70 BINDER 5.5%***) DENSE (PLANT MADE) IN SMALL WORKS SUCH AS BRIDGE DECKING, REINSTATEMENT OF TRENCHES ETC. (TRANSPORT OF PREMIX TO BE PAID SEPARATELY.) [SSCM - 507]:						
	** (FOR BINDER CONTENTS SEE GENERAL NOTES - SECTION 29.8)						
	DATA FOR 10 METRIC TONS						
	LABOUR (SK A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	2.00	DAY	B0-004	3,054.68		
	LABOUR (S/SK)	4.00	DAY	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				283.87		
	ASPHALT CONC.(COLD MIX WITH 60/70 CUT BACK) MATERIAL	10.00	M.T.	B0-365	0.00		
	ROAD ROLLER (7 HOURS)	0.88	DAY	B0-111	11,056.36		
					22,694.91		
	COST FOR 10 M.T.				22,694.91		
	RATE PER 1 M.T.			S1-033	2,269.49		
				SAY	2,269.50	1,135.47	1,134.03
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						
S1-033A	LAY AND COMPACT IMULSIFIED ASPHALT CONCRETE COLD MIX WITH BITUMEN EMULSION CSS-1(6.67%** BY WGT OF AGG.) AND 19 MM AGGREGATE, DENSE (PLANT MADE) IN SMALL WORKS SUCH AS BRIDGE DECKING, REINSTATEMENT OF TRENCHES ETC. [SUPPLY AND TRANSPORT OF PREMIX(COLD MIX) TO BE PAID SEPARATELY.] [SSCM - 507]:						
	** (FOR BINDER CONTENTS SEE GENERAL NOTES - SECTION 29.8.)						
	DATA FOR 10 METRIC TONS						
	LABOUR (SK A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	2.00	DAY	B0-004	3,054.68		
	LABOUR (S/SK)	4.00	DAY	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				283.87		
	ASPHALT CONCRETE(COLD MIX) MATERIAL	10.00	M.T.	B0-366	0.00		
	ROAD ROLLER (7 HOURS)	0.88	DAY	B0-111	11,056.36		
					22,694.91		
	COST FOR 10 M.T.				22,694.91		
	RATE PER 1 M.T.			S1-033A	2,269.49		
				SAY	2,269.50	1,135.47	1,134.03
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-034	LAY AND COMPACT ASPHALT CONCRETE USING PAVER (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY) :						
	DATA FOR 200 M.T. PER 12 HOURS						
	CHARGE HAND (SK'A) [13 HOURS]	-	DAY	B0-001	0.00		
	CHECKER (SK'A) - DO -	3.70	DAY	B0-001	7,030.00		
	LABOUR (SK'B' - 2 NOS.) -DO-	2.40	DAY	B0-002	4,080.00		
	LABOUR (S/Sk - 8 NOS.) -DO-	7.40	DAY	B0-003	11,840.00		
	LABOUR (U/Sk - 10 NOS.) -DO-	22.50	DAY	B0-004	34,365.15		
	ALLOW 2.5% ON LABOUR FOR TOOLS				1,432.88		
	FARM TRACTOR WITH BROOM - 6 HOURS	1.10	DAY	B0-122	12,970.52		
	MECHANICAL PAVER (6 M) - 11 HOURS	5.30	HRS	B0-129	41,891.04		
	VIBRATING ROLLER-7 TON (SMOOTH-TANDEM)						
	1 NOS. X 8 HOURS.	5.50	HRS	B0-135	14,802.15		
	PNEUMATIC ROLLER - 2NOSX12 HOURS	11.80	HRS	B0-112	55,959.02		
	WATER BOWSER(6000 LT) - 4 HOURS	1.20	DAY	B0-128	12,480.00		
	COMPRESSOR	7.80	HRS	B0-144	53,604.80		
					250,455.56		
	COST FOR 200 M.T.				250,455.56		
	RATE PER 1 M.T.			S1-034	1,252.28		
				SAY	1,252.30	286.58	965.72
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						
S1-034A	LAY AND COMPACT ASPHALT CONCRETE MANUALLY (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY) :						
	DATA FOR 15 M.T. PER 4 HOURS						
	SUPERVISOR (SK'A) [6 HOURS]	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/Sk - 5 NOS.) -DO-	2.50	DAY	B0-003	4,000.00		
	LABOUR (U/Sk - 7 NOS.) -DO-	3.50	DAY	B0-004	5,345.69		
	ALLOW 2.5% ON LABOUR FOR TOOLS				269.27		
	VIBRATING ROLLER 6-7 TON (SMOOTH-TANDEM)						
	1 NOS. X 8 HOURS.	2.00	HRS	B0-135	5,382.60		
					16,422.56		
	COST FOR 15 M.T.				16,422.56		
	RATE PER 1 M.T.			S1-034	1,094.84		
				SAY	1,094.85	718.05	376.80
	* AVERAGE 0.6270 CU.M OF AGGREGATE REQUIRED FOR 1.0 METRIC TON OF PREMIX						
S1-035	SURFACING (SAND SEALING - MANUAL) USING BITUMEN EMULSION(CRS-1) AT THE RATE OF 1 LTR./SQ.M INCLUDING PREPARING SURFACE, BLINDING WITH SAND AT THE RATE OF 4 CU.M/500 SQ.M AND PRESSING WITH IMPROVISED HAND ROLLERS : (PATCHING POT HOLES IF NECESSARY & EXTERNAL TRANSPORT TO PAY SEPARATELY)						
	DATA FOR 372 SQ.M						
(A)	EMULSION @ 1L/SQ.M. AND COVER WITH SAND :						
	LABOUR (S/SK)	2.00	DAY	B0-003	3,200.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOLS				99.09		
	EMULSION (CRS-1)	372.00	LTR	B0-353	35,034.96		
	SAND	2.98	CU.M	B0-331	11,904.00		
	BASKETS	0.33	NO.	B0-631	86.67		
(B)	INTERNAL TRANSPORT OF MATERIAL: TRACTOR & TRAILOR	0.25	DAY	B0-117	1,608.25		
					52,696.63		
	FOR 372 SQ.M				52,696.63		
	RATE PER 1 SQ.M			S1-035	141.66		
				SAY	141.65	10.66	130.99

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-035A	PATCHING MINOR POT HOLES USING SAND, BITUMEN EMULSION MIX 1:8 WHERE NECESSARY, PRIOR TO SAND SEALING.						
	DATA FOR 372 SQ.M						
	PREPARATION & PATCHING MINOR POT HOLES :						
	LABOUR (S/SK)	2.00	DAY	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				80.00		
	SAND	0.23	CU.M	B0-331	906.14		
	EMULSION (CRS-1)	9.09	LTR	B0-353	856.30		
	INTERNAL TRANSPORT OF MATERIAL:						
	TRACTOR & TRAILOR	0.25	DAY	B0-117	1,608.25		
					6,650.69		
	COST PER 372 SQ.M				6,650.69		
	COST PER 1 SQ.M			S1-035A	17.88		
				SAY	17.90	8.60	9.30
S1-036 *	SAND SEALING WITH BITUMEN EMULSION CRS-1 AT THE RATE OF 1 LTR/SQ.M USING PLANT, INCLUDING BRUSHING, CLEANING, BLINDING, WITH SAND @ OF 125 SQ.M/CU.M, AND ROLLING WITH PNEUMATIC ROLLER AND INTERNAL TRANSPORT [SSCM 504] :						
	(PATCHING POT HOLES IF NECESSARY & EXTERNAL TRANSPORT TO PAY SEPARATELY)						
	APPLICATION OF EMULSION, BLINDING & ROLLING						
	DATA FOR 2000 SQ.M (USING PLANT)						
	APPLYING EMULSION CRS-1 AS PER ITEM S1-027	2,000.00	LITRE	S1-027	209,700.00		
	SAND FOR BLINDING	16.00	CU.M	B0-331	64,000.00		
	SAND/CHIP SPREADER	0.50	DAY	B0-121	19,501.09		
	PNEUMATIC ROLLER	2.00	HOURS	B0-112	9,484.58		
	TRACTOR AND TRAILOR	0.50	DAY	B0-117	3,216.49		
	LABOUR (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (US/K)	5.00	DAYS	B0-004	7,636.70		
	ADD 2.5% ON LABOUR FOR TOOLS				238.42		
					315,677.27		
	COST PER 2000 SQ.M				315,677.27		
	COST PER 1 SQ.M			S1-036	157.84		
				SAY	157.85	7.95	149.90
S1-036A*	CHIP SEALING WITH BITUMEN EMULSION CRS-1 AT THE RATE OF 1.25 LTR/SQ.M USING PLANT, INCLUDING BRUSHING, CLEANING, BLINDING (PATCHING POT HOLES IF NECESSARY & EXTERNAL TRANSPORT TO PAY SEPARATELY)						
	APPLICATION OF EMULSION, BLINDING & ROLLING						
	DATA FOR 2000 SQ.M (USING PLANT)						
	APPLYING EMULSION CRS-1 AS PER ITEM S1-027	2,500.00	LITRE	S1-027	0.00		
	CHIPS (9.5 MM) FOR BLINDING	16.00	CU.M	B0-308A	46,400.00		
	SAND/CHIP SPREADER	0.50	DAY	B0-121	19,501.09		
	PNEUMATIC ROLLER	2.00	HOURS	B0-112	9,484.58		
	TRACTOR AND TRAILOR	0.50	DAY	B0-117	3,216.49		
	LABOUR (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (US/K)	5.00	DAYS	B0-004	7,636.70		
	ADD 2.5% ON LABOUR FOR TOOLS				238.42		
					88,377.27		
	COST PER 2000 SQ.M				88,377.27		
	COST PER 1 SQ.M			S1-036	44.19		
				SAY	44.20	4.77	39.43

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-036B*	FOG SEALING WITH BITUMEN EMULSION CSS-1 AT THE RATE OF 1.5 LTR/SQ.M USING PLANT, INCLUDING BRUSHING, CLEANING, BLINDING (PATCHING POT HOLES IF NECESSARY & EXTERNAL TRANSPORT TO PAY SEPARATELY)						
	APPLICATION OF EMULSION, BLINDING & ROLLING DATA FOR 2000 SQ.M (USING PLANT)						
	APPLYING EMULSION CSS-1 AS PER ITEM S1-027	3,000.00	LITRE	S1-027A	0.00		
	SAND FOR BLINDING	16.00	CU.M	B0-331	64,000.00		
	SAND/CHIP SPREADER	0.50	DAY	B0-121	19,501.09		
	PNEUMATIC ROLLER	2.00	HOURS	B0-112	9,484.58		
	TRACTOR AND TRAILOR	0.50	DAY	B0-117	3,216.49		
	LABOUR (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (US/K)	5.00	DAYS	B0-004	7,636.70		
	ADD 2.5% ON LABOUR FOR TOOLS				238.42		
					105,977.27		
	COST PER 2000 SQ.M				105,977.27		
	COST PER 1 SQ.M			S1-036	52.99		
				SAY	53.00	4.77	48.23
S1-036C*	CRACK SEALING WITH BITUMEN EMULSION CSS-1 AT THE RATE OF 1.25 LTR/SQ.M USING PLANT, INCLUDING BRUSHING, CLEANING, BLINDING (PATCHING POT HOLES IF NECESSARY & EXTERNAL TRANSPORT TO PAY SEPARATELY)						
	APPLICATION OF EMULSION, BLINDING & ROLLING DATA FOR 2000 SQ.M (USING PLANT)						
	APPLYING EMULSION CSS-1 AS PER ITEM S1-027	2,500.00	LITRE	S1-027A	0.00		
	SAND FOR BLINDING	16.00	CU.M	B0-331	64,000.00		
	SAND/CHIP SPREADER	0.50	DAY	B0-121	19,501.09		
	PNEUMATIC ROLLER	2.00	HOURS	B0-112	9,484.58		
	TRACTOR AND TRAILOR	0.50	DAY	B0-117	3,216.49		
	LABOUR (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (US/K)	5.00	DAYS	B0-004	7,636.70		
	ADD 2.5% ON LABOUR FOR TOOLS				238.42		
					105,977.27		
	COST PER 2000 SQ.M				105,977.27		
	COST PER 1 SQ.M			S1-036	52.99		
				SAY	53.00	4.77	48.23
* NOTE : THE ABOVE RATE IS APPLICABLE ONLY IF CHIP SPREADER AND PNEUMATIC ROLLER ARE USED FOR THE CONSTRUCTION. OTHERWISE APPROVED SSR SHOULD BE ADOPTED.							
S1-037	RECONSTRUCT BASE WITH PENETRATION MACADAM USING NOMINAL SIZE 50 MM AGGRGATE AND 19 MM KEY AGGREGATE FROM STOCK PILES, TO A COMPACTED THICKNESS OF 75 MM, ON EXISTING PAVEMENTS. [SSCM 406] (COST OF BINDER, AND AGGREGATE INCLUDING TRANSPORT TO BE PAID SEPARATELY):						
	DATA FOR 100 SQ.M						
	A. SWEEPING OVER TARRD SURFACE	100.00	SQ.M	S1-026	430.00		
	B. CONSTRUCTION OF PEN. MACADUM BASE USING 50 MM AGGREGATE	9.00	CU.M	M1-004	12,239.55		
	C. SPREADING KEY AGGREGATE 19 MM AFTER APPLICATION OF BINDER ON COMPACTED 50 MM COURSE AGGREGATE AND ROLLING (AS PER TABLE 406.1)	1.80	CU.M	M1-004	2,447.91		
					15,117.46		
	COST PER 100 SQ.M				15,117.46		
	RATE PER 1 SQ.M			S1-037	151.17		
				SAY	151.15	77.12	74.03

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
S1-038	RECONSTRUCT BASE WITH PENETRATION MACADAM USING NOMINAL SIZE 37.5 MM AGGRGATE AND 12.5 MM KEY AGGREGATE FROM STOCK PILES, TO A COMPACTED THICKNESS OF 55 MM, ON EXISTING PAVEMENTS. [SSCM 406] (COST OF BINDER, AND AGGREGATE INCLUDING TRANSPORT TO BE PAID SEPARATELY):						
	DATA FOR 100 SQ.M						
A.	SWEEPING OVER TARRD SURFACE	100.00	SQ.M	S1-026	430.00		
B.	CONSTRUCTION OF PEN. MACADUM BASE USING 37.5 MM AGGREGATE	6.00	CU.M	M1-004	8,159.70		
C.	SPREADING KEY AGGREGATE 12.5 MM AFTER APPLICATION OF BINDER ON COMPACTED 37.5 MM COURSE AGGREGATE AND ROLLING (AS PER TABLE 406.1)	1.50	CU.M	M1-004	2,039.93		
					10,629.63		
	COST PER 100 SQ.M				10,629.63		
	RATE PER 1 SQ.M			S1-038	106.30		
				SAY	106.30	54.81	51.49
S1-039	CORRECTION OF CORRUGATIONS, DEPRESSIONS AND CAMBERING ROAD SURFACES USING ASPHALT CONCRETE COMPACTED BY VIBRATING ROLLER INCLUDING INTERNAL TRANSPORT. (APPLICATION OF TACK COAT AND SUPPLY OF ASPHALT CONCRETE TO BE PAID SEPARATELY) :						
	DATA FOR	12.00	M.TONS				
	LABOUR SK'A'	1.00	DAY	B0-001	1,900.00		
	LABOUR U/SK (LOADING AND MANUAL TRANS)	6.00	DAY	B0-004	9,164.04		
	LABOUR S/SK (SPREADING & LEVELLING)	2.00	DAY	B0-003	3,200.00		
	ADD 2.5 % OF LABOUR FOR TOOLS				356.60		
	VIBRATING ROLLER (1/2 - 1 TON)	1.00	DAY	B0-109	7,016.73		
	TRACTOR & TRAILER (INTERNAL TRANSPORT)	0.50	DAY	B0-117	3,216.49		
					24,853.86		
	TOTAL COST FOR 12 M.T				24,853.86		
	RATE PER 1 M.T.			S1-039	2,071.16		
				SAY	2,071.15	1,188.67	882.48
S1-040 *	SAND SEALING WITH BITUMEN EMULSION CRS-2 AT THE RATE OF 1 LTR/SQ.M USING PLANT, AND BLINDING WITH SAND AT THE RATE OF 125 SQ.M/CU.M. ON D.B.S.T./S.B.S.T (TRIPLE SEAL) INCLUDING INTERNAL TRANSPORT [SSCM 504] : (BINDER TRANSPORT TO SITE TO PAY SEPARATELY)						
A	APPLICATION OF BINDER:						
	DATA FOR	4,546.00	LITRES				
	CRS 2 AT SITE	4,546.00	LTR	B0-354	454,600.00		
	EMULSION DISTRIBUTOR - 4000 LITRES	1.00	DAY	B0-123	26,739.12		
	LABOUR (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (SK/B)	1.00	DAY	B0-002	1,700.00		
	LABOUR (U/SK)	3.00	DAY	B0-004	4,582.02		
					489,521.14		
	COST FOR 4546 LTRES				489,521.14		
	COST PER 1 LITRE			S1-040.A	107.68		
B	SAND SEALING :						
	DATA FOR	2,000.00	SQ.M				
	APPLYING CRS-2 @ 1.0 LTR/SQ.M AS IN (A) ABOVE	2,000.00	LTR	S1-040.A	215,360.00		
	SAND FOR BLINDING	16.00	CU.M	B0-331	64,000.00		
	SAND/CHIP SPREADER	0.50	DAY	B0-121	19,501.09		
	PNEUMATIC ROLLER	2.00	HOURS	B0-112	9,484.58		
	TRACTOR AND TRAILOR	0.50	DAYS	B0-117	3,216.49		
	LABOUR (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (US/K)	5.00	DAYS	B0-004	7,636.70		
	ADD 2.5% ON LABOUR FOR TOOLS				238.42		
					321,337.27		
	TOTAL COST FOR 2000 SQ.M				321,337.27		
	RATE PER 1 SQ.M			S1-040	160.67		
				SAY	160.65	6.57	154.08
* NOTE : THIS ITEM SHOULD BE USED ONLY FOR SAND SEALING ON ROAD SURFACE AFTER DBST / SBST WORK AND USE OF PNEUMATIC ROLLER IS ESSENTIAL. IF EMULSION AND/OR THE RATE OF APPLICATION OR THE METHOD OF SAND SPREADING TO BE CHANGED, S.S.R. SHALL BE PREPARED AND APPROVED.							

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION VIII							
ROAD SURFACE MAINTENANCE							
INTERNAL TRANSPORT OF HOT BITUMEN UP TO 16 KM AND SAND TRANSPORT UP TO 16 KM INCLUDED IN THE RATES.							
MN1-001	PATCHING WITH HOT BITUMEN(60/70) USING 14 LITRES PER 1/2 KM (SSCM 1102.1 - 1102.3):						
	DATA FOR 6.4 KILO METRES						
	LABOUR (S/SK) - BIT. APPLI. & BLIND.	7.75	DAYS	B0-003	12,400.00		
	LABOUR (U/SK) - INTER. TRANS./SAND	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOLS				329.09		
	BITUMEN	179.20	LTR	B0-351	15,411.20		
	SAND	1.42	CU.M	B0-331	5,663.40		
	FIREWOOD	0.25	CU.M	B0-395	375.66		
	BASKETS	0.17	NO	B0-631	44.20		
	TRACTOR	0.25	DAY	B0-117	1,608.25		
					36,595.47		
	COST PER 6.4 KILO METRES				36,595.47		
	RATE PER 1/2 KM			MN1-001	2,859.02		
				SAY	2,859.00	1,028.41	1,830.59
MN1-002	PATCHING WITH HOT BITUMEN(60/70) USING 21 LTRS. PER 1/2 KM.:						
	3/2 TIMES OF ITEM CODE MN1-001	1.50	KM	MN1-001	4,288.53		
	RATE PER 1/2 KM.			MN1-002	4,288.53		
				SAY	4,288.55	1,542.62	2,745.93
MN1-003	PATCHING WITH HOT BITUMEN(60/70) USING 28 LTRS. PER 1/2 KM.:						
	2 TIMES OF ITEM CODE MN1-001	2.00	KM	MN1-001	5,718.04		
	RATE PER 1/2 KM.			MN1-003	5,718.04		
				SAY	5,718.05	2,056.82	3,661.23
MN1-004	PATCHING WITH HOT BITUMEN(60/70) USING 35 LTRS. PER 1/2 KM.:						
	2.5 TIMES OF ITEM CODE MN1-001	2.50	KM	MN1-001	7,147.55		
	RATE PER 1/2 KM.			MN1-004	7,147.55		
				SAY	7,147.55	2,571.03	4,576.52
MN1-005	PATCHING WITH HOT BITUMEN(60/70) USING 42 LTRS. PER 1/2 KM.:						
	3 TIMES OF ITEM CODE MN1-001	3.00	KM	MN1-001	8,577.06		
	RATE PER 1/2 KM.			MN1-005	8,577.06		
				SAY	8,577.05	3,085.24	5,491.81

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MN1-006	PATCHING WITH HOT BITUMEN(60/70) USING 49 LTRS. PER 1/2 KM.:						
	7/2 TIMES OF ITEM CODE MN1-001 RATE PER 1/2 KM.	3.50	KM	MN1-001 MN1-006	10,006.57 10,006.57		
				SAY	10,006.55	3,599.44	6,407.11
MN1-007	PATCHING WITH HOT BITUMEN(60/70) USING 56 LTRS. PER 1/2 KM.:						
	4 TIMES OF ITEM CODE MN1-001 RATE PER 1/2 KM.	4.00	KM	MN1-001 MN1-007	11,436.08 11,436.08		
				SAY	11,436.10	4,113.65	7,322.45
MN1-008	EXTENSIVE PATCHING FOR EVERY ADDITIONAL 7 LTRS. HOT BITUMEN(60/70):						
	1/2 TIMES OF ITEM CODE MN1-001 RATE PER 1/2 KM.	0.50	KM	MN1-001 MN1-008	1,429.51 1,429.51		
				SAY	1,429.50	514.21	915.29
MN1-009	PATCHING WITH BITUMEN EMULSION (CRS-1) USING 14 LTRS PER 1/2 KILO METRE:						
	DATA FOR 6.4 KILO METRES						
	LABOUR (S/SK) - EMUL. APPL. & BLIND.	3.00	DAYS	B0-003	4,800.00		
	LABOUR (U/SK) - INTER. TRANS./SAND	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOLS				139.09		
	EMULSION, CRS - 1	180.00	LTR	B0-353	16,952.40		
	SAND	1.42	CU.M	B0-331	5,663.40		
	BASKETS	0.17	NO.	B0-631	44.20		
	FARM TRACTOR AND TRAILOR	0.25	DAY	B0-117	1,608.25		
					29,971.01		
	COST PER 6.4 KILO METRES				29,971.01		
	RATE PER 1/2 KILO METRE			MN1-009	2,341.48		
				SAY	2,341.50	434.66	1,906.84
MN1-010	PATCHING WITH BITUMEN EMULSION CRS-1 USING 21 LTRS. PER 1/2 KM.:						
	1 1/2 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	1.50	KM	MN1-009 MN1-010	3,512.23 3,512.23		
				SAY	3,512.25	651.99	2,860.26
MN1-011	PATCHING WITH BITUMEN EMULSION CRS-1 USING 28 LTRS. PER 1/2 KM.:						
	2 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	2.00	KM	MN1-009 MN1-011	4,682.97 4,682.97		
				SAY	4,682.95	869.32	3,813.63
MN1-012	PATCHING WITH BITUMEN EMULSION CRS-1 USING 35 LTRS. PER 1/2 KM.:						
	2.5 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	2.50	KM	MN1-009 MN1-012	5,853.71 5,853.71		
				SAY	5,853.70	1,086.65	4,767.05

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MN1-013	PATCHING WITH BITUMEN EMULSION CRS-1 USING 42 LTRS. PER 1/2 KM.:						
	3 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	3.00	KM	MN1-009 MN1-013	7,024.45 7,024.45		
				SAY	7,024.45	1,303.99	5,720.46
MN1-014	PATCHING WITH BITUMEN EMULSION CRS-1 USING 49 LTRS. PER 1/2 KM.:						
	3.5 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	3.50	KM	MN1-009 MN1-014	8,195.20 8,195.20		
				SAY	8,195.20	1,521.32	6,673.88
MN1-015	PATCHING WITH BITUMEN EMULSION, CRS-1 USING 56 LTRS. PER 1/2 KM.:						
	4 TIMES OF ITEM CODE MN1-009 RATE PER 1/2 KM.	4.00	KM	MN1-009 MN1-015	9,365.94 9,365.94		
				SAY	9,365.95	1,738.65	7,627.30
MN1-016	EXTENSIVE PATCHING FOR EVERY ADDITIONAL 7 LTRS. BITUMEN EMULSION, CRS-1						
	50% OF ITEM CODE MN1-009 RATE PER 1/2 KM.	0.50	KM	MN1-009 MN1-016	1,170.74 1,170.74		
				SAY	1,170.75	217.33	953.42
MN1-017	50 MM - 19 MM AGGREGATE ROLLER PATCHING:						
	<u>DATA FOR 8.5 CU.M</u>						
	LABOUR (U/SK) - TRIMMING EDGES/CLEAN.	6.00	DAYS	B0-004	9,164.04		
	LABOUR (S/SK) - FILL	6.00	DAYS	B0-003	9,600.00		
	ALLOW 2.5% ON LABOUR				469.10		
	ROLLER (8-10 TON)	1.00	DAYS	B0-111	12,635.84		
	BASKETS	1.50	NO.	B0-631	390.00		
	FARM TRACTOR AND TRAILOR	0.33	DAY	B0-117	2,122.88		
					34,381.86		
	COST PER 8.5 CU.M				34,381.86		
	RATE PER CU.M			MN1-017	4,044.93		
				SAY	4,044.95	2,207.53	1,837.42
MN1-018	50 MM - 19 MM AGGREGATE STAMPED PATCHING:						
	<u>DATA FOR 0.71 CU.M</u>						
	LABOUR (U/SK) - TR. EDGES/CLEAN.	0.50	DAYS	B0-004	763.67		
	LABOUR (S/SK) - FILL	0.50	DAYS	B0-003	800.00		
	LABOUR (S/SK) - STAMPING	1.00	DAYS	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR				79.09		
	BASKETS	0.13	NO.	B0-631	33.80		
					3,276.56		
	COST PER 0.71 CU.M				3,276.56		
	RATE PER CU.M			MN1-018	4,614.88		
				SAY	4,614.90	4,455.87	159.03

* * *

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION IX							
ROAD SIDE AND DRAINAGE SYSTEM (SSCM 701.3)							
(* RATE TO INCLUDE SPREADING THE RESULTING MATERIALS SUITABLY IN THE VICINITY UNLESS OTHERWISE DIRECTED)							
DR1-001	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	381.84		
	ALLOW 2.5% ON LABOUR FOR TOOLS				49.55		
	BASKETS	0.33	NO.	B0-631	85.80		
	ALLOW FOR COIR STRING	1.00	ITEM	B0-716	27.55		

					2,144.73		

	COST PER 2.83 CU.M				2,144.73		

	RATE PER 1 CU.M			DR1-001	757.86		
					=====		
				SAY	757.85	700.30	57.55
DR1-002	CUTTING NEW SIDE DRAINS IN MED. SOIL : *						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)	1.50	DAYS	B0-003	2,400.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	381.84		
	ALLOW 2.5% ON LABOUR FOR TOOLS				69.55		
	BASKETS	0.33	NO.	B0-631	85.80		
	ALLOW FOR COIR STRING	1.00	ITEM	B0-716	27.55		

					2,964.73		

	COST PER 2.83 CU.M				2,964.73		

	RATE PER 1 CU.M			DR1-002	1,047.61		
					=====		
				SAY	1,047.60	982.98	64.62
DR1-003	CUTTING NEW SIDE DRAINS IN HARD SOIL : *						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	381.84		
	ALLOW 2.5% ON LABOUR				89.55		
	BASKETS	0.33	NO.	B0-631	85.80		
	ALLOW FOR COIR STRING	1.00	ITEM	B0-716	27.55		

					3,784.73		

	COST PER 2.83 CU.M				3,784.73		

	RATE PER 1 CU.M			DR1-003	1,337.36		
					=====		
				SAY	1,337.35	1,265.67	71.68

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
DR1-004	CUTTING NEW SIDE DRAINS IN SOFT ROCK : *						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)	2.25	DAYS	B0-003	3,600.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	381.84		
	ALLOW 2.5% ON LABOUR				99.55		
	BASKETS	0.33	NO.	B0-631	85.80		
	ALLOW FOR COIR STRING	1.00	TEM	B0-716	27.55		
					4,194.73		

	COST PER 2.83 CU.M				4,194.73		
	RATE PER 1 CU.M			DR1-004	1,482.24		
				SAY	1,482.25	1,407.01	75.24
DR1-005	CUTTING NEW SIDE DRAINS IN UNCLASSIFIED SOIL :*						
	DATA FOR 1 CU.M						
	RATE @ DR1-001				757.86		
	RATE @ DR1-002				1,047.61		
	RATE @ DR1-003				1,337.36		

	AVERAGE BASIC COST PER 1 CU.M				1,047.61		

	RATE PER 1 CU.M			DR1-005	1,047.61		
				SAY	1,047.60	982.98	64.62
DR1-005A	CUTTING SIDE DRAINS OF STD. DIMENSIONS IN UNCLASSIFIED SOIL USING MACHINE (BACK HOE J.C.B.) INCLUDING SHAPING, TRIMMING AND LEVELLING BOTTOM MANUALLY.						
	DATA FOR 10 METER LENGTH (5.06 CU.M)						
	TOP WIDTH OF DRAIN	900.00	MM				
	BOTTOM WIDTH OF DRAIN	450.00	MM				
	AVERAGE DEPTH OF DRAIN	750.00	MM				
	J.C.B. BUCKET WIDTH	600.00	MM				
	TOTAL EXCAVATION IN 10 M LENGTH ((.9 + .4) / 2 X .75 X 10]	5.06	CU.M				
	EXCAVATION BY JCB BUCKET (.6 X .6 X 10)	3.60	CU.M				
	VOLUME LEFT FOM MANUAL WORK	1.46	CU.M				
	AVERAGE OUTPUT OF J.C.B. PER HOUR	9.00	CU.M				
	HIRE CHAGE PER HOUR	0.13	DAY	B0-115	3,125.85		
	COST OF EXCAVATION BY JCB FOR 3.6 CU.M	0.40	HOUR		1,250.34		
	COST OF MANUAL EXCAVATION FOR SHAPING TRIMMING & LEVELLING	1.46	CU.M	DR1-005	1,529.51		

	TOTAL COST FOR 5.06 CU.M				2,779.85		

	RATE PER 1 CU.M			DR1-005A	549.38		
				SAY	549.40	283.63	265.77

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
DR1-006	CUTTING NEW SIDE DRAINS IN ROCK : *						
	DATA FOR 2.83 CU.M						
	LABOUR SKILLED (B)	2.00	DAYS	B0-002	3,400.00		
	LABOUR (U/SK)	2.25	DAYS	B0-004	3,436.52		
	ALLOW 2.5% ON LABOUR FOR TOOLS				170.91		
	ALLOW FOR FUEL, FORGE, ETC.	1.00	ITEM	B0-723	48.90		
	POWDER	0.45	KG	B0-501	269.21		
	FUSE	3.96	M	B0-502	1,537.41		
	STEEL	0.57	KG	B0-503	149.89		
					9,012.84		

	COST PER 2.83 CU.M				9,012.84		
	RATE PER 1 CU.M			DR1-006	3,184.75		
					=====		
				SAY	3,184.75	2,415.73	769.02
DR1-007	TURFING (EXCLUDING ROYALTY, TRANSPORT AND WATERING & MAINTENANCE) [SSCM 802.3a]:						
	DATA FOR 19 SQ.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				76.37		
	ALLOW FOR PEGS	1.00	ITEM	B0-746	45.70		
	BASKETS	0.17	NO.	B0-631	44.20		
					3,220.95		

	COST PER 19 SQ.M				3,220.95		
	RATE PER 1 SQ.M			DR1-007	169.52		
					=====		
				SAY	169.50	160.77	8.73
DR1-008	WATERING AND MAINTAINING TURF FOR THREE MONTHS INCLUDING TRANSPORT OF WATER						
	DATA FOR 4000 SQ.M PER DAY						
	LABOUR U/SK	7.00	DAYS	B0-004	10,691.38		
	ALLOW 2.5% OF LABOUR FOR TOOLS				267.28		
	TRACTOR AND TRAILOR	1.00	DAY	B0-117	6,432.98		
	TANK AND 50 MM. PUMP	1.00	DAY	B0-104	1,272.04		
					18,663.68		

	COST PER 4000 SQ.M PER TIME				18,663.68		
	ASSUMING 16 DAYS WATERING PER MONTH, COST PER 4000 SQ.M FOR THREE MONTHS (3816.67X16X3)				895,856.86		

					895,856.86		
	RATE PER 1 SQ.M FOR WAT. & MAINT. FOR 3 MONTHS			DR1-008	223.96		
					=====		
				SAY	223.95	128.30	95.65

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
DR1-009	LEVELLING & TRIMMING EARTH : *						
	DATA FOR 74 SQ.M						
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	85.80		
					1,651.32		
	COST PER 74 SQ.M				1,651.32		
	RATE PER 1 SQ.M			DR1-009	22.32		
				SAY	22.30	20.64	1.66
DR1-010	CLEARING SILT ETC. FROM KERBS & CHANNELS (SSCM 12053): *						
	DATA FOR 120 METRES						
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.17	NO.	B0-631	44.20		
					1,609.72		
	COST PER 120 METRES				1,609.72		
	RATE PER 1 METRE			DR1-010	13.41		
				SAY	13.40	12.73	0.67
DR1-011	CUTTING SCUPPER DRAINS ON ANY SOIL OTHER THAN ROCK TO AN AVERAGE WIDTH OF 0.75 M WITH PROPER GRADIENT AND AVE. DEPTH OF 100 MM (SSCM 1304.3): *						
	DATA FOR 36 METRES						
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	86.67		
					3,366.67		
	COST PER 36 METRES				3,366.67		
	RATE PER 1 METRE			DR1-011	93.52		
				SAY	93.50	88.89	4.61
DR1-012	CLEANING AND DESILTING OF CULVERTS (SSCM 1303.3): *						
	DATA FOR 6 CULVERTS						
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	86.67		
					1,652.19		
	COST FOR 6 CULVERTS				1,652.19		
	RATE PER 1 NO CULVERT			DR1-012	275.37		
				SAY	275.35	254.56	20.79

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
DR1-013	CLEANING CHOKED CULVERTS (WITH HEAD ROOM > 1 M **): *						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.33	NO.	B0-631	76.37 86.67		
					3,217.71		
	COST FOR 2.83 CU.M				3,217.71		
	RATE PER 1 CU.M			DR1-013	1,137.00		
				SAY	1,137.00	1,079.39	57.61
	** IF THE CULVERT HEAD ROOM IS LESS THAN 1 METRE, WORK SHALL BE CARRIED OUT ON DAY WORKS BASIS.						
DR1-014	CLEANING DESILTING EXISTING SIDE DRAINS AND LEAD UP DRAINS TO PROPER SHAPE AND GRADIENT AND TRANSPORT OF EXCAVATED MATERIALS FROM ROAD SIDE UP TO 100 M : *						
	DATA FOR 1.6 KILO METRES						
(1)	CLEANING VEGETATION ETC. FROM EDGES OF DRAINS .6 M AVERAGE WIDTH: LABOUR (U/SK)	2.50	DAYS	B0-004	3,818.35		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.46		
					3,913.81		
	COST PER 1600 M				3,913.81		
(2)	REMOVING SILT ASSUME DEPTH 75 MM GET SILTED ONCE IN SIX MONTHS (1600 x .45 x .075)	54.00	CU.M	E1-003	46,461.60		
					46,461.60		
	COST PER 1600 M				46,461.60		
(3)	15% OF SILT HEAD CARRY (54 x 15/100)	8.10	CU.M	T1-001	3,487.05		
					3,487.05		
	COST PER 1600 M				3,487.05		
	TOTAL COST PER 1600 M (1)+(2)+(3)				53,862.46		
	RATE PER 1 M			DR1-014	33.66		
				SAY	33.65	31.83	1.82

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE -----	DESCRIPTION OF ITEM -----	QUANTITY -----	UNIT ---	PRICE CODE -----	AMOUNT (Rs.) -----	LABOUR INPUT -----	OTHER INPUTS -----
DR1-015	CLEARING INLETS AND OUTLETS OF CULVERTS: *						
	FOR 10 CULVERTS						
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS	0.50	NO.	B0-631	57.28 130.00		
					----- 2,478.29		
	RATE PER 10 CULVERTS				----- 2,478.29		
	RATE PER CULVERT	1.00	NO.	DR1-015	247.83		
				SAY	=====		
					247.85	229.10	18.75

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION X							
BRIDGES, CULVERTS & RETAINING WALLS ETC.							
ST1-001	DEMOLISHING DRY COURSED MASONRY INCLUDING STACKING OR LOADING. [SSCM 202.2]:						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - DEMOLISHING	1.00	DAY	B0-003	1,600.00		
	LABOUR (U/SK) - DEMOLISHING	3.00	DAYS	B0-004	4,582.02		
	LABOUR (U/SK) - COLLECTING	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				230.92		
					9,467.62		
	COST PER 2.83 CU.M				9,467.62		
	RATE PER 1 CU.M			ST1-001	3,345.45		
				SAY	3,345.45	3,263.85	81.60
ST1-002	DEMOLISHING COURSED MASONRY IN CEMENT MORTAR INCLUDING STACKING OR LOADING.:						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)-DEMOLISHING	1.00	DAY	B0-003	1,600.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	LABOUR (U/SK)-COLLECTING & STACK.	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				269.10		
					11,033.14		
	COST PER 2.83 CU.M				11,033.14		
	RATE PER 1 CU.M			ST1-002	3,898.64		
				SAY	3,898.65	3,803.55	95.10
ST1-003	DEMOLISHING RANDOM RUBBLE MASONRY IN CEMENT MORTAR INCLUDING STACKING OR LOADING.:						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK)-DEMOLISHING	2.00	DAYS	B0-003	3,200.00		
	LABOUR (U/SK)-COLLECTING & STACK.	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				118.18		
					4,845.52		
	COST PER 2.83 CU.M				4,845.52		
	RATE PER 1 CU.M			ST1-003	1,712.20		
				SAY	1,712.20	1,670.44	41.76

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-004	RANDOM RUBBLE MASONRY, 150-225 MM RUBBLE IN APPROVED CEMENT & SAND MORTAR 1:6 (EXCLUDING TRANSPORT OF RUBBLE & PILING) [SSCM 1006.3]:						
	DATA FOR 2.83 CU.M						
	RUBBLE 150 MM - 225 MM (LESS PILING)	3.11	CU.M	B0-302	5,622.57		
	MASONS (SK/B)	3.00	DAYS	B0-002	5,100.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				367.50		
	CEMENT	5.00	50 KG	B0-401	5,080.00		
	SAND	1.13	CU.M	B0-332	4,528.00		
	BASKETS (1/6)	0.17	NO.	B0-631	43.33		
	WATER	27.00	LTR	B0-788	33.75		
					30,375.15		
	COST PER 2.83 CU.M				30,375.15		
	RATE PER 1 CU.M			ST1-004	10,733.27		
				SAY	10,733.25	5,194.35	5,538.90
ST1-005	RANDOM RUBBLE MASONRY, 150-225 MM RUBBLE IN APPROVED CEMENT & SAND MORTAR 1:5 (EXCLUDING TRANSPORT OF RUBBLE & PILING) [SSCM 1006.3]:						
	DATA FOR 2.83 CU.M						
	RUBBLE 150 MM - 225 MM (LESS PILING)	3.11	CU.M	B0-302	5,622.57		
	MASONS (SK/B)	3.00	DAYS	B0-002	5,100.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				367.50		
	CEMENT	6.00	50 KG	B0-401	6,096.00		
	SAND	1.13	CU.M	B0-332	4,528.00		
	BASKETS (1/6)	0.17	NO.	B0-631	43.33		
	WATER	32.50	LTR	B0-788	40.63		
					31,398.03		
	COST PER 2.83 CU.M				31,398.03		
	RATE PER 1 CU.M			ST1-005	11,094.71		
				SAY	11,094.70	5,194.35	5,900.35
ST1-006	RANDOM RUBBLE MASONRY IN APPROVED CEMENT & SAND MORTAR 1:6 WITH AVAILABLE RUBBLE 150-225 MM :						
	DATA FOR 2.83 CU.M						
	AS PER ITEM ST1-004	2.83	CU.M	ST1--004	30,375.15		
	DEDUCT FOR RUBBLE (LESS PILING)	3.11	CU.M	B0-302	5,622.57		
					24,752.58		
	COST PER 2.83 CU.M				24,752.58		
	RATE PER 1 CU.M			ST1-006	8,746.50		
				SAY	8,746.50	5,194.35	3,552.15

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-007	RANDOM RUBBLE MASONRY IN APPROVED CEMENT & SAND MORTAR 1:5 WITH AVAILABLE RUBBLE 150-225 MM :						
	DATA FOR 2.83 CU.M						
	AS PER ITEM ST1--005	2.83	CU.M	ST1-005	31,398.03		
	DEDUCT FOR RUBBLE (LESS PILING)	3.11	CU.M	B0-302	5,622.57		
					25,775.46		
	COST PER 2.83 CU.M				25,775.46		
	RATE PER 1 CU.M			ST1-007	9,107.94		
				SAY	9,107.95	5,194.35	3,913.60
ST1-008	DRY MASONRY WITH AVAILABLE HEAVY RUBBLE OR BOULDERS (SSCM 1006.3 (B):						
	DATA FOR 2.83 CU.M						
	MASONS (SK/A)	2.50	DAYS	B0-001	4,750.00		
	LABOUR (S/SK)	5.00	DAYS	B0-003	8,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				318.75		
					13,068.75		
	COST PER 2.83 CU.M				13,068.75		
	RATE PER 1 CU.M			ST1-008	4,617.93		
				SAY	4,617.95	4,505.30	112.65
ST1-009	DRY RANDOM MASONRY WITH RUBBLE 150-225 MM (EXCLUDING TRANSPORT OF RUBBLE & PILING):						
	DATA FOR 2.83 CU.M						
	MASONRY RUBBLE (LESS PILING)	2.83	CU.M	B0-302	5,116.36		
	MASONS (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	4.00	DAYS	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				255.00		
					15,571.36		
	COST PER 2.83 CU.M				15,571.36		
	RATE PER 1 CU.M			ST1-009	5,502.25		
				SAY	5,502.25	3,604.24	1,898.01
ST1-010	DRY RANDOM MASONRY WITH AVAILABLE RUBBLE 150-225 MM:						
	DATA FOR 2.83 CU.M						
	MASONS (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	4.00	DAYS	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				255.00		
					10,455.00		
	COST PER 2.83 CU.M				10,455.00		
	RATE PER 1 CU.M			ST1-010	3,694.35		
				SAY	3,694.35	3,604.24	90.11

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-011	PACKING AVAILABLE RUBBLE AND AGGREGATE FILTER LAYERS BEHIND MASONRY WALLS: DATA FOR 2.83 CU.M ----- LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS (1/3)	1.75 0.33	DAYS NO.	B0-004 B0-631	2,672.85 66.82 86.67 ----- 2,826.33 ----- 2,826.33		
	COST PER 2.83 CU.M				998.70		
	RATE PER 1 CU.M			ST1-011	998.70		
				SAY	998.70	944.47	54.23
ST1-012	CLAY PUDDLED & LAID BEHIND MASONRY WALLS (EXCL. TRANSPORT OF CLAY) (SSCM 705.3): DATA FOR 2.83 CU.M ----- CLAY AS PER ITEM E1-008 LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS BASKETS (1/3)	2.83 1.00 0.33	CU.M DAY NO.	E1-008 B0-004 B0-631	4,065.72 1,527.34 38.18 86.67 ----- 5,717.91 ----- 5,717.91		
	COST PER 2.83 CU.M				2,020.46		
	RATE PER 1 CU.M			ST1-012	2,020.46		
				SAY	2,020.45	1,915.92	104.53
ST1-013	GROUTING COURSED STONE MASONRY JOINTS WITH WITH APPROVED CEMENT & SAND MORTAR 1:3 (SSCM 804.2(C): DATA FOR 19 SQ.M ----- MASONS (SK/A) LABOUR (S/SK) ALLOW 2.5% ON LABOUR FOR TOOLS CEMENT SAND BASKETS (1/40) WATER	1.00 2.00 1.50 0.14 0.03 27.00	DAY DAYS 50 KG CU.M NO. LTR	B0-001 B0-003 B0-401 B0-332 B0-631 B0-788	1,900.00 3,200.00 127.50 1,524.00 566.34 6.50 33.75 ----- 7,358.09 ----- 7,358.09		
	COST PER 19 SQ.M				387.27		
	RATE PER 1 SQ.M			ST1-013	387.27		
				SAY	387.25	268.42	118.83

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-014	GROUTING RUBBLE PAVING WITH CONCRETE CLASS C, 1:2:4(19 MM) (EXCL. TRANSPORT OF AGGR. FOR CONCRETE & PILING):						
	DATA FOR 2.83 CU.M						
	CONCRETE AS PER ITEM ST1-046	0.28	CU.M	ST1-046	4,318.80		
	MASONS (SK/A)	0.25	DAY	B0-001	475.00		
	LABOUR (S/SK)	0.50	DAY	B0-003	800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				31.88		
					5,625.67		
	COST PER 2.83 CU.M				5,625.67		
	RATE PER 1 CU.M			ST1-014	1,987.87		
				SAY	1,987.85	894.08	1,093.77
ST1-015	GROUTING RUBBLE PAVING WITH APPROVED CEMENT & SAND MORTAR (1:3):						
	DATA FOR 19 SQ.M						
	MASONS (SK/A)	1.50	DAY	B0-001	2,850.00		
	LABOUR (S/SK)	3.00	DAYS	B0-003	4,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				191.25		
	CEMENT	3.00	50 KG	B0-401	3,048.00		
	SAND	0.28	CU.M	B0-332	1,132.00		
	BASKETS (2/40)	0.05	NO.	B0-631	13.00		
	WATER	54.00	LTR	B0-788	67.50		
					12,101.75		
	COST PER 19 SQ.M				12,101.75		
	RATE PER 1 SQ.M			ST1-015	636.93		
				SAY	636.95	402.63	234.32
ST1-016	FORMING WEEP HOLES IN MASONRY CONSTRUCTION (LABOUR ONLY) [SSCM 706.3] :						
	DATA FOR 6 NOS.						
	MASONS (SK/A)	1.00	DAY	B0-001	1,900.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				47.50		
					1,947.50		
	COST PER 6 NOS.				1,947.50		
	RATE PER 1 NO.			ST1-016	324.58		
				SAY	324.60	316.67	7.93

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-017	FORMING WEEP HOLES USING P.V.C. PIPES OF INT. DIA. NOT LESS THAN 100 MM. COMPLETE WITH DRIPLEGE AND SURROUND FINISH SMOOTH: DATA FOR 6 M ----- LABOUR Sk'B' (3.5 HOURS) LABOUR U/Sk (1.5 HOURS) ALLOW 2.5% OF LABOUR FOR TOOLS ALLOW 10% OF LABOUR FOR CEMENT, SAND ETC. P.V.C. PIPE DIA. 110 MM ALLOW 5% FOR WASTE	0.44 0.19 6.00	DAY DAY M	B0-002 B0-004 B0-636	743.75 286.38 25.75 103.01 2,223.90 111.20 ----- 3,493.99 ----- 3,493.99 582.33 =====		
	COST FOR 6 METRES				3,493.99		
	RATE PER 1 METRE			ST1-017	582.33		
				SAY	582.35	171.69	410.66
ST1-018	SHORING WITH 37.5 MM THICK CLASS II TIMBER PLANKS UP TO 3 M DEPTH.: DATA FOR 9 SQ.M (INCLUDING 10% WASTE & FOR 6 USES) ----- 37.5 MM THICK PLANKS (CLASS II TIMBER) CARPENTER (SK/A) LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	61.88 0.50 1.50	CU.DECI M DAY DAYS	B0-392 B0-001 B0-004	6,261.75 950.00 2,291.01 81.03 ----- 9,583.79 ----- 9,583.79 1,064.87 =====		
	COST PER 9 SQ.M				9,583.79		
	RATE PER 1 SQ.M			ST1-018	1,064.87		
				SAY	1,064.85	360.11	704.74
ST1-019	SUPPLYING & FIXING CLASS II TIMBER STRUTS ETC. FOR SHORING UP TO 3 M DEPTH.: DATA FOR 45 CU.DECI M (INCLUDING 10% WASTE & FOR 6 USES) ----- TIMBER CLASS II CARPENTER (SK/A) LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	8.25 0.50 1.00	CU.DECI M DAY DAY	B0-392 B0-001 B0-004	834.90 950.00 1,527.34 61.93 ----- 3,374.17 ----- 3,374.17 74.98 =====		
	COST PER 45 CU.DECI M				3,374.17		
	RATE PER 1 CU.DECI M			ST1-019	74.98		
				SAY	75.00	55.05	19.95

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-020	SUPPLYING AND FIXING CLASS II TIMBER IN SHORING UP TO 3 M DEPTH (RATE PER AREA BASIS) :						
	CONSIDER EXCAVATION OF TRENCH 3 X 1.5 X 3 M DATA FOR 18 SQ.M SURFACE AREA BOTH SIDES, (INCLUDING 10% WASTE AND 12 USES ON STRUTS)						
	50X100 MM TIMBER REQUIREMENT :						
	HORIZONTALS - 3 M X 3 NO X 2 SIDES =	18.00	M				
	VERTICLES - 3 M X 3.5 NO X 2 SIDES =	21.00	M				
	CROSS STRUTS - 1.4 M X 7 NO =	9.80	M				
	TOTAL LENGTH =	48.80	M				
	VOL. OF TIMBER (.050X.100X48.8X1000) =	244.00	CU.DECI M				
	COST OF 18 SQ.M AS PER ITEM ST1-018,	18.00	SQ.M	ST1-018	19,167.57		
	COST OF STRUTS ETC. FOR 18 SQ.M AREA,	44.73	CU.DECI M	ST1-019	3,354.18		
	TOTAL COST FOR 18 SQ.M				22,521.75		
	RATE PER 1 SQ.M			ST1--020	1,251.21		
				SAY	1,251.20	496.93	754.27
ST1-021	LIFTING SOIL FOR EVERY 1.5 M BEYOND THE INITIAL 1.5 M :						
	DATA FOR 2.83 CU.M PER LIFTING 1 STAGE						
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.18		
					1,565.52		
	COST PER 2.83 CU.M PER LIFT				1,565.52		
	RATE PER 1 CU.M PER LIFT			ST1-021	553.19		
				SAY	553.20	539.70	13.50
ST1-022	LIFTING WEDGE STONES EVERY 1.5 M BEYOND THE INITIAL 1.5 M :						
	DATA FOR 2.83 CU.M PER LIFTING 1 STAGE						
	LABOUR (U/SK)	3.00	DAYS	B0-004	4,582.02		
	ALLOW 2.5% ON LABOUR FOR TOOLS				114.55		
					4,696.57		
	COST PER 2.83 CU.M PER LIFT				4,696.57		
	RATE PER 1 CU.M PER LIFT			ST1-022	1,659.57		
				SAY	1,659.55	1,619.09	40.46
ST1-023	LIFTING RUBBLE OR CONCRETE EVERY 1.5 M BEYOND THE INITIAL 1.5 M :						
	DATA FOR 2.83 CU.M PER LIFTING 1 STAGE						
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS				57.28		
					2,348.29		
	COST PER 2.83 CU.M PER LIFT				2,348.29		
	RATE PER 1 CU.M PER LIFT			ST1-023	829.78		
				SAY	829.80	809.54	20.26

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-024	LOWERING WEDGED STONES EVERY 1.5 M BEYOND THE INITIAL 1.5 M :						
	DATA FOR 2.83 CU.M PER LOWERING 1 STAGE						
	LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	2.00	DAYS	B0-004	3,054.68 76.37		
					3,131.05		
	COST PER 2.83 CU.M				3,131.05		
	RATE PER 1 CU.M PER LOWER			ST1-024	1,106.38		
				SAY	1,106.40	1,079.39	27.01
ST1-025	LOWERING RUBBLE OR CONCRETE FOR EVERY 1.5 M BEYOND THE INITIAL 1.5 M:						
	DATA FOR 2.83 CU.M PER LOWERING 1 STAGE						
	LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	1.00	DAY	B0-004	1,527.34 38.18		
					1,565.52		
	COST PER 2.83 CU.M				1,565.52		
	RATE PER 1 CU.M PER LOWER			ST1-025	553.19		
				SAY	553.20	539.70	13.50
ST1-026	RENDERING 12.5 MM THICK IN CEMENT SAND MORTAR 1:2 MIX (ROUGH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	1.50	DAYS	B0-003	2,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.63		
	CEMENT	1.40	50 KG	B0-401	1,417.32		
	SAND	0.12	CU.M	B0-332	483.60		
	BASKETS (1/50)	0.02	NO.	B0-631	5.20		
	WATER	35.34	LTR	B0-788	44.18		
					5,870.92		
	COST PER 9.3 SQ.M				5,870.92		
	RATE PER 1 SQ.M			ST1-026	631.28		
				SAY	631.30	411.29	220.01

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-027	RENDERING 12.5 MM THICK IN CEMENT SAND MORTAR 1:2 MIX (SMOOTH FINISH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (S/SK)	1.50	DAYS	B0-003	2,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				107.50		
	CEMENT	1.77	50 KG	B0-401	1,795.27		
	SAND	0.12	CU.M	B0-332	483.60		
	BASKETS (1/50)	0.02	NO.	B0-631	5.20		
	WATER	47.43	LTR	B0-788	59.29		
					6,750.86		
	COST PER 9.3 SQ.M				6,750.86		
	RATE PER 1 SQ.M			ST1-027	725.90		
				SAY	725.90	462.37	263.53
ST1-028	RENDERING 19 MM THICK IN CEMENT SAND MORTAR 1:2 MIX (ROUGH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				127.50		
	CEMENT	2.14	50 KG	B0-401	2,173.22		
	SAND	0.19	CU.M	B0-332	744.00		
	BASKETS (1/40)	0.03	NO.	B0-631	6.50		
	WATER	53.94	LTR	B0-788	67.43		
					8,218.65		
	COST PER 9.3 SQ.M				8,218.65		
	RATE PER 1 SQ.M			ST1-028	883.73		
				SAY	883.75	548.39	335.36
ST1-029	RENDERING 19 MM THICK IN CEMENT SAND MORTAR 1:2 MIX (SMOOTH FINISH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.25	DAY	B0-001	2,375.00		
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				139.38		
	CEMENT	2.51	50 KG	B0-401	2,551.18		
	SAND	0.19	CU.M	B0-332	744.00		
	BASKETS (1/40)	0.03	NO.	B0-631	6.50		
	WATER	66.03	LTR	B0-788	82.54		
					9,098.59		
	COST PER 9.3 SQ.M				9,098.59		
	RATE PER 1 SQ.M			ST1-029	978.34		
				SAY	978.35	599.46	378.89

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-030	RENDERING 12.5 MM THICK IN CEMENT SAND MORTAR 1:3 MIX (ROUGH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	1.50	DAYS	B0-003	2,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.63		
	CEMENT	1.12	50 KG	B0-401	1,133.86		
	SAND	0.15	CU.M	B0-332	595.20		
	BASKETS (1/50)	0.02	NO.	B0-631	5.20		
	WATER	26.97	LTR	B0-788	33.71		
					5,688.59		
	COST PER 9.3 SQ.M				5,688.59		
	RATE PER 1 SQ.M			ST1-030	611.68		
				SAY	611.70	411.29	200.41
ST1-031	RENDERING 12.5 MM THICK IN CEMENT SAND MORTAR 1:3 MIX (SMOOTH FINISH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (S/SK)	1.50	DAYS	B0-003	2,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				107.50		
	CEMENT	1.58	50 KG	B0-401	1,606.30		
	SAND	0.15	CU.M	B0-332	595.20		
	BASKETS (1/50)	0.02	NO.	B0-631	5.20		
	WATER	39.06	LTR	B0-788	48.83		
					6,663.02		
	COST PER 9.3 SQ.M				6,663.02		
	RATE PER 1 SQ.M			ST1-031	716.45		
				SAY	716.45	462.37	254.08
ST1-032	RENDERING 19 MM THICK IN CEMENT SAND MORTAR 1:3 MIX (ROUGH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				127.50		
	CEMENT	1.77	50 KG	B0-401	1,795.27		
	SAND	0.22	CU.M	B0-332	892.80		
	BASKETS (1/40)	0.03	NO.	B0-631	6.50		
	WATER	39.99	LTR	B0-788	49.99		
					7,972.06		
	COST PER 9.3 SQ.M				7,972.06		
	RATE PER 1 SQ.M			ST1-032	858.13		
				SAY	858.15	548.39	309.76

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-033	RENDERING 19 MM THICK IN CEMENT SAND MORTAR 1:3 MIX (SMOOTH FINISH):						
	DATA FOR 9.3 SQ.M						
	MASONS (SK/A)	1.25	DAY	B0-001	2,375.00		
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				139.38		
	CEMENT	2.14	50 KG	B0-401	2,173.22		
	SAND	0.22	CU.M	B0-332	892.80		
	BASKETS (1/40)	0.03	NO.	B0-631	6.50		
	WATER	53.01	LTR	B0-788	66.26		
					8,853.16		
	COST PER 9.3 SQ.M				8,853.16		
	RATE PER 1 SQ.M			ST1-033	951.95		
				SAY	951.95	599.46	352.49
ST1-034	MIXING & LAYING MANUALLY, CEMENT CONCRETE 1:4:8(50 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING) (SSCM 1001.4):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				275.63		
	CEMENT	9.00	50 KG	B0-401	9,144.00		
	AGGREGATE 50 MM (LESS PILING)	2.83	CU.M	B0-311	6,382.00		
	SAND	1.70	CU.M	B0-332	6,800.00		
	ALLOW FOR WATER	2.83	ITEM	B0-782	66.93		
	BASKET (2/3)	0.67	NO.	B0-631	173.33		
					33,866.89		
	COST PER 2.83 CU.M				33,866.89		
	RATE PER 1 CU.M			ST1-034	11,967.10		
				SAY	11,967.10	3,895.76	8,071.34
ST1-035	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:4:8(50 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING) (SSCM 1001.8-1001.9):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	27.00	50 KG	B0-401	27,432.00		
	AGGREGATE 50 MM (LESS PILING)	8.50	CU.M	B0-311	19,168.55		
	SAND	5.10	CU.M	B0-332	20,400.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NOS.	B0-631	520.00		
	HIRE OF CONC. MIXER (400 LTRS.)	1.00	DAY	B0-102	7,356.32		
					101,685.57		
	COST PER 8.5 CU.M				101,685.57		
	RATE PER 1 CU.M			ST1-035	11,963.01		
				SAY	11,963.00	3,048.16	8,914.84

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-036	MIXING & LAYING MANUALLY CEMENT CONCRETE 1:4:8(50 MM) WITH 20% PLUMS(VOLUME BATCHING), USING CRUSHER RUN AGGREGATE.(EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				313.81		
	CEMENT	7.20	50 KG	B0-401	7,315.20		
	AGGREGATE 50 MM (LESS PILING)	2.26	CU.M	B0-311	5,096.58		
	RUBBLE 150-225 MM (LESS PILING)	0.57	CU.M	B0-302	1,023.27		
	SAND	1.36	CU.M	B0-332	5,440.00		
	ALLOW FOR WATER	2.83	ITEM	B0-782	66.93		
	BASKET (2/3)	0.67	NO.	B0-631	173.33		
					31,981.46		
	COST PER 2.83 CU.M				31,981.46		
	RATE PER 1 CU.M			ST1-036	11,300.87		
				SAY	11,300.85	4,435.46	6,865.39
ST1-037	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:4:8(50 MM) WITH 20% PLUMS(VOLUME BATCHING) USING CRUSHER RUN AGGREGATE.(EXCLUDING TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	21.60	50 KG	B0-401	21,945.60		
	AGGREGATE 50 MM (LESS PILING)	6.80	CU.M	B0-311	15,334.84		
	RUBBLE 150-225 MM (LESS PILING)	1.70	CU.M	B0-302	3,073.43		
	SAND	4.10	CU.M	B0-332	16,400.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NO.	B0-631	520.00		
	HIRE OF CONC. MIXER (400 LTRS.)	1.00	DAY	B0-102	7,356.32		
					91,438.88		
	COST PER 8.5 CU.M				91,438.88		
	RATE PER 1 CU.M			ST1-037	10,757.52		
				SAY	10,757.50	3,048.16	7,709.34
	* NOTE: WHEN HAND BROKEN AGGREGATE(50 MM OR 37.5 MM) ARE USED, INPLACE OF CRUSHER RUN AGGREGATE, ON APPROVAL BY PD/CE S.S.RR. TO BE PREPARED BASED ON THE SAME NORMS.						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-038	MIXING & LAYING MANUALLY, CEMENT CONCRETE 1:3:6(37.5 MM) WITH 20% PLUMS(VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				313.81		
	CEMENT	9.00	50 KG	B0-401	9,144.00		
	AGGREGATE 37.5 MM (LESS PILING)	2.26	CU.M	B0-310	4,652.80		
	RUBBLE 150-225 MM (LESS PILING)	0.57	CU.M	B0-302	1,023.27		
	SAND	1.36	CU.M	B0-332	5,433.60		
	ALLOW FOR WATER	2.83	ITEM	B0-782	66.93		
	BASKET (2/3)	0.67	NO.	B0-631	173.33		
					33,360.08		
	COST PER 2.83 CU.M				33,360.08		
	RATE PER 1 CU.M			ST1-038	11,788.02		
				SAY	11,788.00	4,435.46	7,352.54
ST1-039	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:3:6(37.5 MM) WITH 20% PLUMS(VOLUME BATCHING) USING CRUSHER RUN AGGREGATE.(EXCL.TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAY	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	27.00	50 KG	B0-401	27,432.00		
	AGGREGATE 37.5 MM (LESS PILING)	6.79	CU.M	B0-310	13,958.40		
	RUBBLE 150-225 MM (LESS PILING)	1.70	CU.M	B0-302	3,069.81		
	SAND	4.08	CU.M	B0-332	16,300.80		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NO.	B0-631	520.00		
	HIRE OF CONC. MIXER (LTRS.)	1.00	DAY	B0-102	7,356.32		
					95,446.03		
	COST PER 8.5 CU.M				95,446.03		
	RATE PER 1 CU.M			ST1-039	11,228.94		
				SAY	11,228.95	3,048.16	8,180.79

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-040	MIXING & LAYING MANUALLY, CEMENT CONCRETE 1:3:6(37.5 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING) (SSCM 1001.4):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				313.81		
	CEMENT	12.40	50 KG	B0-401	12,598.40		
	AGGREGATE 37.5 MM (LESS PILING)	2.83	CU.M	B0-310	5,816.00		
	SAND	1.70	CU.M	B0-332	6,800.00		
	ALLOW FOR WATER	2.83	ITEM	B0-782	66.93		
	BASKET (2/3)	0.67	NO.	B0-631	173.33		
					38,320.81		
	COST PER 2.83 CU.M				38,320.81		
	RATE PER 1 CU.M			ST1-040	13,540.92		
				SAY	13,540.90	4,435.46	9,105.44
ST1-041	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:3:6(37.5 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	37.23	50 KG	B0-401	37,825.68		
	AGGREGATE 37.5 MM (LESS PILING)	8.50	CU.M	B0-310	17,468.55		
	SAND	5.10	CU.M	B0-332	20,400.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NOS.	B0-631	520.00		
	HIRE OF CONC. MIXER (400 LTRS)	1.00	DAY	B0-102	7,356.32		
					110,379.25		
	COST PER 8.5 CU.M				110,379.25		
	RATE PER 1 CU.M			ST1-041	12,985.79		
				SAY	12,985.80	3,048.16	9,937.64
ST1-042	MIXING & LAYING MANUALLY, CEMENT CONCRETE 1:3:6(19 MM) (VOLUME BATCHING) USING CRUSHED AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING)						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAYS	B0-001	1,425.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				313.81		
	CEMENT	12.40	50 KG	B0-401	12,598.40		
	AGGREGATE 19 MM (LESS PILING)	2.58	CU.M	B0-308A	7,108.22		
	SAND	1.70	CU.M	B0-332	6,800.00		
	ALLOW FOR WATER	2.83	ITEM	B0-782	66.93		
	BASKET	2.00	NOS.	B0-631	520.00		
					39,959.70		
	COST PER 2.83 CU.M				39,959.70		
	RATE PER 1 CU.M			ST1-042	14,120.03		
				SAY	14,120.05	4,435.46	9,684.59

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-043	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:3:6(19 MM) (VOLUME BATCHING) USING CRUSHED AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	37.23	50 KG	B0-401	37,825.68		
	AGGREGATE 19 MM (LESS PILING)	7.74	CU.M	B0-308A	21,324.66		
	SAND	5.10	CU.M	B0-332	20,400.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NOS.	B0-631	520.00		
	HIRE OF CONC. MIXER (400 LTRS)	1.00	DAY	B0-102	7,356.32		
					114,235.35		
	COST PER 8.5 CU.M				114,235.35		
	RATE PER 1 CU.M			ST1-043	13,439.45		
				SAY	13,439.45	3,048.16	10,391.29
ST1-044	MIXING & LAYING MANUALLY CEMENT CONCRETE 1:2:4(37.5 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				313.81		
	CEMENT	16.00	50 KG	B0-401	16,256.00		
	AGGREGATE 37.5 MM (LESS PILING)	2.83	CU.M	B0-310	5,816.00		
	SAND	1.70	CU.M	B0-332	6,800.00		
	ALLOW FOR WATER	2.83	ITEM	B0-782	66.93		
	BASKET (2/3)	0.67	NO.	B0-631	173.33		
					41,978.41		
	COST PER 2.83 CU.M				41,978.41		
	RATE PER 1 CU.M			ST1-044	14,833.36		
					14,833.35	4,435.46	10,397.89

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-045	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:2:4(37.5 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	48.00	50 KG	B0-401	48,768.00		
	AGGREGATE 37.5 MM (LESS PILING)	8.50	CU.M	B0-310	17,468.55		
	SAND	5.10	CU.M	B0-332	20,400.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NOS.	B0-631	520.00		
	HIRE OF CONC. MIXER (400 LTRS.)	1.00	DAY	B0-102	7,356.32		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,318.71		
					123,640.28		
	COST PER 8.5 CU.M				123,640.28		
	RATE PER 1 CU.M			ST1-045	14,545.91		
				SAY	14,545.90	3,048.16	11,497.74
ST1-046	MIXING & LAYING MANUALLY CEMENT CONCRETE 1:2:4(19 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				313.81		
	CEMENT	16.00	50 KG	B0-401	16,256.00		
	AGGREGATE 19 MM (LESS PILING)	2.55	CU.M	B0-308A	7,025.57		
	SAND	1.70	CU.M	B0-332	6,800.00		
	ALLOW FOR WATER	2.83	ITEM	B0-782	66.93		
	BASKET (2/3)	0.67	NO.	B0-631	173.33		
					43,187.98		
	COST PER 2.83 CU.M				43,187.98		
	RATE PER 1 CU.M			ST1-046	15,260.77		
				SAY	15,260.75	4,435.46	10,825.29

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-047	MIXING & LAYING USING CONCRETE MIXER, CEMENT CONCRETE 1:2:4(19 MM) (VOLUME BATCHING) USING CRUSHER RUN AGGREGATE (EXCL. TRANSPORT OF AGGREGATE & PILING):						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	48.00	50 KG	B0-401	48,768.00		
	AGGREGATE 19 MM (LESS PILING)	7.64	CU.M	B0-308A	21,051.90		
	SAND	5.09	CU.M	B0-332	20,376.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NOS.	B0-631	520.00		
	HIRE OF CONC. MIXER (400 LTRS.)	1.00	DAY	B0-102	7,356.32		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,318.71		
					127,199.62		
	COST PER 8.5 CU.M				127,199.62		
	RATE PER 1 CU.M			ST1-047	14,964.66		
				SAY	14,964.65	3,048.16	11,916.49
ST1-048	MIXING & LAYING USING CONCRETE MIXER(W/BATCHING), CEMENT CONCRETE FOR GRADE 25(19 MM) USING CRUSHER RUN AGGREGATES IN FOUNDATIONS AND FLOORS. (EXCLUDING TRANSPORT OF AGGREGATE & PILING): *						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	54.00	50 KG	B0-401	54,864.00		
	AGGREGATE 19 MM (LESS PILING)	7.64	CU.M	B0-308A	21,051.90		
	SAND	5.09	CU.M	B0-332	20,376.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NOS.	B0-631	520.00		
	HIRE OF CONC. MIXER W/B(400LTRS.)	1.00	DAY	B0-136	12,341.34		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,318.71		
					138,280.64		
	COST PER 8.5 CU.M				138,280.64		
	RATE PER 1 CU.M			ST1-048	16,268.31		
				SAY	16,268.30	3,048.16	13,220.14
	* SEE GENERAL NOTES: SECTION 33.7						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-048A	MIXING & LAYING USING CONCRETE MIXER(W/BATCHING), CEMENT CONCRETE FOR GRADE 25(70% 37.5+30%19) USING CRUSHER RUN AGGREGATES. (EXCLUDING TRANSPORT OF AGGREGATE & PILING): *						
	DATA FOR	8.50	CU.M				
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	49.81	50 KG	B0-401	50,606.96		
	AGGREGATE 37.5 MM (LESS PILING)	4.59	CU.M	B0-310	9,433.02		
	AGGREGATE 19 MM (LESS PILING)	2.04	CU.M	B0-308A	5,620.45		
	SAND	5.09	CU.M	B0-332	20,376.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NOS.	B0-631	520.00		
	HIRE OF CONC. MIXER W/B(400LTRS.)	1.00	DAY	B0-136	12,341.34		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,318.71		
					128,025.17		
	COST PER 8.5 CU.M				128,025.17		
	RATE PER 1 CU.M			ST1-048A	15,061.79		
				SAY	15,061.80	3,048.16	12,013.64
	* SEE GENERAL NOTES: SECTION 33.7						
ST1-049	MIXING & LAYING USING CONCRETE MIXER(W/BATCHING) CEMENT CONCRETE GRADE 30(19 MM), WITH CRUSHER RUN AGGREGATE. (EXCLUDING TRANSPORT OF AGGREGATE & PILING): *						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	69.00	50 KG	B0-401	70,104.00		
	AGGREGATE 19 MM (LESS PILING)	7.70	CU.M	B0-308A	21,207.84		
	SAND	5.09	CU.M	B0-332	20,376.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NO.	B0-631	520.00		
	HIRE OF CONC. MIXER W/B(400LTRS.)	1.00	DAY	B0-136	12,341.34		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,318.71		
					153,676.58		
	COST PER 8.5 CU.M				153,676.58		
	RATE PER 1 CU.M			ST1-049	18,079.60		
				SAY	18,079.60	3,048.16	15,031.44
	* SEE GENERAL NOTES: SECTION 33.7						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-050	MIXING & LAYING USING CONCRETE MIXER(W/BATCHING), CEMENT CONCRETE GRADE 40(19 MM), WITH CRUSHER RUN AGGREGATE. (EXCLUDING TRANSPORT OF AGGREGATE AND PILING)*						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	CEMENT	83.90	50 KG	B0-401	85,237.32		
	AGGREGATE 19 MM (LESS PILING)	7.74	CU.M	B0-308A	21,310.88		
	SAND	5.10	CU.M	B0-332	20,400.00		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NO.	B0-631	520.00		
	HIRE OF CONC. MIXER W/B(400LTRS.)	1.00	DAY	B0-136	12,341.34		
	HIRE OF PORKER VIBRATOR	1.00	DAY	B0-106	2,318.71		
					168,936.95		
	COST PER 8.5 CU.M				168,936.95		
	RATE PER 1 CU.M			ST1-050	19,874.93		
					=====		
				SAY	19,874.95	3,048.16	16,826.79
	* SEE GENERAL NOTES: SECTION 33.7						
ST1-051	MIXING & LAYING CEMENT CONCRETE BY HAND :						
	DATA FOR 2.83 CU.M						
	MASON (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				313.81		
	ALLOW FOR WATER	2.83	ITEM	B0-782	66.93		
	BASKET (2/3)	0.67	NOS.	B0-631	173.33		
					13,106.41		
	COST PER 2.83 CU.M				13,106.41		
	RATE PER 1 CU.M			ST1-051	4,631.24		
					=====		
				SAY	4,631.25	4,435.46	195.79
ST1-052	MIXING & LAYING CEMENT CONCRETE BY POWER DRIVEN CONCRETE MIXER V/BATCHING:						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	10.00	DAYS	B0-003	16,000.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				647.73		
	ALLOW FOR WATER	8.50	ITEM	B0-781	251.60		
	BASKET	2.00	NOS.	B0-631	520.00		
	HIRE OF CONC. MIXER (400 LTRS.)	1.00	DAY	B0-102	7,356.32		
					34,685.01		
	COST PER 8.5 CU.M				34,685.01		
	RATE PER 1 CU.M			ST1-052	4,080.59		
					=====		
				SAY	4,080.60	3,048.16	1,032.44

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-053	CURING OF CONCRETE DECKS, SLABS, BEAMS, WALLS ETC. [SSCM 1011.11]:						
	DATA FOR 37.16 SQ.M, FOR 14 DAYS						
	SAW DUST	1.42	CU.M	B0-648	180.48		
	SAW DUST SPREAD AS PER EW1-002	1.42	CU.M	EW1-002	281.02		
	LABOUR (U/SK) (WATERING)	2.50	DAYS	B0-004	3,818.35		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.46		
	TRACTOR & TRAILOR	1.66	DAYS	B0-117	10,678.75		
	BASKETS	0.17	NO.	B0-631	44.20		
	ALLOW FOR ROPE	1.00	ITEM	B0-715	68.75		
					15,167.01		

	COST PER 37.16 SQ.M PER 14 days				15,167.01		
	RATE PER 1 SQ.M PER DAY			ST1-053	29.15		
					=====		
				SAY	29.15	7.80	21.35
ST1-054	FABRICATE & LAY M.S. BARS AS REINFORCEMENT(INCL. TRANSPORT):						
	DATA FOR 50 KG - (INCLUDING FOR WASTE :	15.00	%)				
	MILD STEEL	57.50	KG	B0-411	8,241.67		
	BARBENDER (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				87.50		
	ALLOW 10% ON LABOUR FOR SPACER BLOCKS				350.00		
	BINDING WIRE	0.45	KG	B0-431	107.41		
					12,286.58		

	COST PER 50 KG				12,286.58		
	RATE PER 1 KG			ST1-054	245.73		
					=====		
				SAY	245.75	70.00	175.75
ST1-055	FABRICATE & LAY TOR STEEL AS REINFORCEMENT(INCL. TRANSPORT):						
	DATA FOR 50 KG - (INCLUDING FOR WASTE :	15.00	%)				
	TOR STEEL	57.50	KG	B0-411A	12,983.50		
	BARBENDER (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				87.50		
	ALLOW 10% ON LABOUR FOR SPACER BLOCKS				350.00		
	BINDING WIRE	0.45	KG	B0-431	106.34		
					17,027.34		

	COST PER 50 KG				17,027.34		
	RATE PER 1 KG			ST1-055	340.55		
					=====		
				SAY	340.55	70.00	270.55

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-056	CUTTING & LAYING REINFORCEMENT FABRIC (EXCLUDING COST OF REINFORCEMENT FABRIC) :						
	DATA FOR 18.5 SQ.M						
	BLACKSMITH (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				87.50		
	BINDING WIRE	0.11	KG	B0-431	26.85		
					3,614.35		
	COST PER 18.5 SQ.M				3,614.35		
	RATE PER 1 SQ.M			ST1-056	195.37		
				SAY	195.35	189.19	6.16
ST1-057	SUPPLYING & FIXING 25 MM THICK PLANKS OF CLASS II TIMBER AS SHUTTERING, INCLUDING REMOVING [SSCM 1008.3 (b)]:						
	DATA FOR 9.30 SQ.M(INCLUDING 10% WASTE & FOR 3 USES)						
	TIMBER PLANK (CLASS II)	85.25	CU.DECL.M	B0-392	8,627.30		
	CARPENTER (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				85.68		
	MOULD OIL	1.14	LTR	B0-602	49.02		
	NAILS	0.45	KG	B0-432	88.18		
					12,277.52		
	COST PER 9.30 SQ.M				12,277.52		
	RATE PER 1 SQ.M			ST1-057	1,320.16		
				SAY	1,320.15	368.53	951.62
ST1-057A	SUPPLYING & FIXING 25 MM THICK PLANKS OF CLASS II TIMBER AS SHUTTERING FOR CONCRETE ROADS AND CURB FOR INTERLOCKING BLOCK PAVING ROADS INCLUDING REMOVING [SSCM 1008.3 (b)]:						
	DATA FOR 9.30 SQ.M(INCLUDING 10% WASTE & FOR 5 USES)						
	TIMBER PLANK (CLASS II)	51.15	CU.DECL.M	B0-392	5,176.38		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.18		
	MOULD OIL	1.14	LTR	B0-602	49.02		
	NAILS	0.25	KG	B0-432	48.99		
					6,839.91		
	COST PER 9.30 SQ.M				6,839.91		
	RATE PER 1 SQ.M			ST1-057	735.47		
				SAY	735.45	164.23	571.22

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-058	SUPPLYING & FIXING CLASS II TIMBER BEARERS, JOISTS, ETC. INCLUDING DISMANTLING IN SHUTTERING . [SSCM 1008.3(a)]:						
	DATA FOR 283 CU.DECI M (INCLUDING 10% WASTE & FOR 5 USES)						
	CARPENTER (SK/A)	3.00	DAYS	B0-001	5,700.00		
	LABOUR (U/SK)	3.00	DAYS	B0-004	4,582.02		
	ALLOW 2.5% ON LABOUR FOR TOOLS				257.05		
	TIMBER (CLASS II) BEARERS & JOISTS	62.26	CU.DECI.M	B0-392	6,300.71		
					16,839.78		
	COST PER 283 CU.DECI M				16,839.78		
	RATE PER 1 CU.DECI M			ST1-058	59.50		
				SAY	59.50	36.33	23.17
ST1-059	100 - 150 MM DIA. ROUND JUNGLE TIMBER SUPPLIED & FIXED AS PROPS.:						
	DATA FOR 12.2 M (INCL. 10% WASTE & FOR 5 USES)						
	ROUND JUNGLE TIMBER	2.68	M	B0-393	85.89		
	CARPENTER (SK/A)	0.25	DAY	B0-001	475.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	381.84		
	ALLOW 2.5% ON LABOUR FOR TOOLS				21.42		
					964.14		
	COST PER 12.2 METRES				964.14		
	RATE PER 1 METRE			ST1-059	79.03		
				SAY	79.05	70.23	8.82
ST1-060	150 - 200 MM DIA. ROUND JUNGLE TIMBER SUPPLIED & FIXED AS PROPS.:						
	DATA FOR 12.2 M(INCL. 10% WASTE FOR 5 USES)						
	ROUND JUNGLE TIMBER	2.68	M	B0-394	134.20		
	CARPENTER (SK/A)	0.25	DAY	B0-001	475.00		
	LABOUR (U/SK)	0.25	DAY	B0-004	381.84		
	ALLOW 2.5% ON LABOUR FOR TOOLS				21.42		
					1,012.46		
	COST PER 12.2 METRES				1,012.46		
	RATE PER 1 METRE			ST1-060	82.99		
				SAY	83.00	70.23	12.77

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-061	FORMWORK SMOOTH FINISH WITH CLASS II TIMBER FOR BRIDGE BEAMS, BRIDGE DECK UNDER SIDES AND SIDES INCLUDING DISMANTLING. [SSCM 1008.3(B)]: CONSIDER A BEAM SECTION 300X450 MM AND 6100 MM LONG. DATA FOR 7.32 SQ.M (INCLUDING 10% WASTE & FOR 3 USES)						
	CARPENTER (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (SK/B)	1.50	DAY	B0-002	2,550.00		
	LABOUR (U/SK)	2.50	DAY	B0-003	4,000.00		
	SMALL TOOLS 2.5% OF LABOUR				211.25		
	CLASS II TIMBER PLANK 25 MM THICK	67.10	CU.DECI M	B0-392	6,790.52		
	CLASS II TIMBER BEARERS & JOISTS	52.36	CU.DECI M	B0-392	5,298.33		
	ROUND JUNGLE TIMBER	7.11	M	B0-393	227.58		
	WIRE NAIL (50 & 75 MM)	3.18	LBS	B0-432	622.18		
	MOULD OIL	3.64	LTR	B0-602	156.39		
					21,756.25		
	COST PER 7.32 SQ.M				21,756.25		
	RATE PER 1 SQ.M			ST1-061	2,972.16		
				SAY	2,972.15	1,154.37	1,817.78
ST1-062	FORMWORK SMOOTH FINISH WITH CLASS II TIMBER, FOR BRIDGE COLUMN SHAFTS INCLUDING DISMANTLING. [SSCM 1008.3(b)]: CONSIDER A COLUMN SECTION 225X225 MM AND 1200 MM HIGH DATA FOR 1.08 SQ.M (INCLUDING 10% WASTE & FOR 3 USES)						
	CARPENTER (SK/A) (1 HOUR)	0.13	DAY	B0-001	237.50		
	LABOUR (SK/B) (2 HOURS)	0.25	DAY	B0-002	425.00		
	LABOUR (U/SK) (3 HOURS)	0.38	DAY	B0-003	600.00		
	SMALL TOOLS 2.5% OF LABOUR				31.56		
	CLASS II TIMBER PLANK 25 MM THICK	9.90	CU.DECI M	B0-392	1,001.88		
	CLASS II TIMBER JOISTS	3.08	CU.DECI M	B0-392	311.70		
	WIRE NAIL	0.45	KG	B0-432	88.18		
	MOULD OIL	1.44	LTR	B0-602	61.92		
	9 MM DIA, M.S.BOLTS 450 MM LONG	0.45	KG	B0-432	88.88		
					2,846.62		
	COST PER 1.08 SQ.M				2,846.62		
	RATE PER 1 SQ.M			ST1-062	2,635.76		
				SAY	2,635.75	1,168.98	1,466.77
ST1-063	FORMWORK SMOOTH FINISH, USING PLYWOOD (SHUTTER 15 MM) AND CLASS II TIMBER BEARERS,JOISTS AND JUNGLE TIMBER PROPS FOR BRIDGE ABUTMENTS, WINGWALLS ETC.: CONSIDER 2 NO PANNELS OF 1 M X 1 M DATA FOR 2 SQ.M (INCLUDING 10% WASTE & FOR 5 USES)						
	CARPENTER (SK/A) - 2 HOURS	0.25	DAY	B0-001	475.00		
	LABOUR (SK/B) - 4 HOURS	0.50	DAY	B0-002	850.00		
	LABOUR (U/SK) - 6 HOURS	0.75	DAY	B0-004	1,145.51		
	ALLOW 2.5% OF LABOUR FOR TOOLS				61.76		
	PLYWOOD 15 MM THICK	0.44	SQ.M	B0-396	430.39		
	CLASS II TIMBER BEARERS & JOISTS ETC (.050 X .100 X 8M) + (.050 X.050 X 4M)	11.00	CU.DECI M	B0-392	1,113.20		
	WIRE NAILS	0.12	KG	B0-432	23.51		
	MOULD OIL	0.24	LTR	B0-602	10.32		
	FIXING BOLTS (10 USES)	0.10	KG	B0-432	19.60		
	JUNGLE TIMBER PROPS, 100 - 150 MM DIA :2 X (3+2+1)M	12.00	M	ST1-059	948.34		
					5,077.62		
	COST PER 2 SQ.M				5,077.62		
	RATE PER 1 SQ.M			ST1-063	2,538.81		
				SAY	2,538.80	1,656.65	882.15

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-064	SUPPLYING & FIXING 25 MM THICK PLANKS AND STRUTS OF CLASS II TIMBER AS FORMWORK ROUGH FINISH, IN FOUNDATION ETC. INCLUDING REMOVING. [SSCM 1008.3(b)]: DATA FOR 5.57 SQ.M (INCLUDING 10% WASTE & FOR 5 USES)						
	CARPENTER (SK/A)	1.00	DAY	B0-001	1,900.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				85.68		
	TIMBER(CLASS II) 25 MM PLANKS & STRUTS	39.62	CU.DECI M	B0-392	4,009.54		
	NAILS	0.23	KG	B0-432	44.44		
	MOULD OIL	0.90	LTR	B0-602	38.70		
					7,605.71		
	COST PER 5.57 SQ.M				7,605.71		
	RATE PER 1 SQ.M			ST1--064	1,365.48		
				SAY	1,365.50	615.32	750.18
ST1-065	FORMWORK SMOOTH FINISH FOR GENERAL PURPOSES, USING 25 MM THICK PLANKS & STRUTS OF CLASS II TIMBER AND ROUND JUNGLE TIMBER PROPS 100-150 MM DIA., INCLUDING DISMANTLING :						
	DATA FOR 5.57 SQ.M (INCL. 10% WASTE & FOR 4 USES)						
	TIMBER CLASS II, 25 MM PLANKS & STRUTS	49.53	CU.DECI M	B0-392	5,011.93		
	ROUND JUNGLE TIMBER PROPS 100-150 MM DIA.	12.20	M	ST1-059	964.14		
	NAILS	0.27	KG	B0-432	53.33		
	MOULD OIL	0.90	LTR	B0-602	38.70		
	CARPENTER (SK/A) - (PLANNING & FIXING)	1.25	DAY	B0-001	2,375.00		
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	ADD 2.5% OF LABOUR FOR TOOLS				99.38		
					10,142.48		
	COST PER 5.57 SQ.M				10,142.48		
	RATE PER 1 SQ.M			ST1-065	1,820.91		
				SAY	1,820.90	867.47	953.43

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-066	LAYING & JOINTING 153 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	0.67	DAY	B0-001	1,266.67		
	LABOUR (S/SK)	0.67	DAY	B0-003	1,066.67		
	LABOUR (U/SK)	1.33	DAY	B0-004	2,036.45		
	ALLOW 2.5% ON LABOUR FOR TOOLS				109.24		
	CONCRETE PIPES (2438 MM LONG)	3.00	NOS.	B0-441	11,400.00		
	CONCRETE PIPE COLLARS	2.00	NOS.	B0-441B	800.00		
	ALLOW FOR CEMENT,SAND AND WATER	2.00	JOINTS	B0-711	50.70		
					16,729.73		
	COST PER 7.32 M LENGTH				16,729.73		
	RATE PER 1 M			ST1-066	2,285.48		
				SAY	2,285.50	596.97	1,688.53
ST1-067	LAYING & JOINTING 229 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	0.50	DAY	B0-003	800.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS				112.90		
	CONCRETE PIPES(2438 MM LONG)	3.00	NOS.	B0-442	18,000.00		
	CONCRETE PIPE COLLARS	2.00	NOS.	B0-442B	1,150.00		
	ALLOW FOR CEMENT,SAND AND WATER	2.00	JOINTS	B0-712	210.50		
					23,989.41		
	COST PER 7.32 M LENGTH				23,989.41		
	RATE PER 1 M			ST1-067	3,277.24		
				SAY	3,277.25	616.94	2,660.31
ST1-068	LAYING & JOINTING 305 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	0.75	DAY	B0-003	1,200.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS				122.90		
	CONCRETE PIPES (2438 MM LONG)	3.00	NOS.	B0-443	17,850.00		
	CONCRETE PIPE COLLARS	2.00	NOS.	B0-443B	1,570.00		
	ALLOW FOR CEMENT,SAND AND WATER	2.00	JOINTS	B0-712	210.50		
					24,669.41		
	COST PER 7.32 M LENGTH				24,669.41		
	RATE PER 1 M			ST1-068	3,370.14		
				SAY	3,370.15	671.59	2,698.56

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-069	LAYING & JOINTING 450 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	0.75	DAY	B0-003	1,200.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS				122.90		
	CONCRETE PIPES (2438 MM LONG)	3.00	NOS.	B0-444	26,850.00		
	CONCRETE PIPE COLLARS	2.00	NOS.	B0-444B	2,145.00		
	ALLOW FOR GROUTING COLLARS	2.00	JOINTS	B0-712	210.50		
					34,244.41		
	COST PER 7.32 M LENGTH				34,244.41		
	RATE PER 1 M			ST1-069	4,678.20		
				SAY	4,678.20	671.59	4,006.61
ST1-070	LAYING & JOINTING 610 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	1.50	DAYS	B0-001	2,850.00		
	LABOUR (S/SK)	1.50	DAYS	B0-003	2,400.00		
	LABOUR (U/SK)	3.00	DAYS	B0-004	4,582.02		
	ALLOW 2.5% ON LABOUR FOR TOOLS				245.80		
	CONCRETE PIPES (2438 MM LONG)	3.00	NOS.	B0-445	39,700.05		
	CONCRETE PIPE COLLARS	2.00	NOS.	B0-445B	2,455.00		
	ALLOW FOR GROUTING COLLARS	2.00	JOINTS	B0-712	210.50		
					52,443.37		
	COST PER 7.32 M LENGTH				52,443.37		
	RATE PER 1 M			ST1-070	7,164.39		
				SAY	7,164.40	1,343.17	5,821.23
ST1-071	LAYING & JOINTING 914 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	1.75	DAYS	B0-001	3,325.00		
	LABOUR (S/SK)	1.75	DAYS	B0-003	2,800.00		
	LABOUR (U/SK)	6.50	DAYS	B0-004	9,927.71		
	ALLOW 2.5% ON LABOUR FOR TOOLS				401.32		
	CONCRETE PIPES (1220 MM LONG)	6.00	NOS.	B0-446	61,050.00		
	CONCRETE PIPE COLLARS	5.00	NOS.	B0-446B	8,100.00		
	ALLOW FOR GROUTING COLLARS	5.00	JOINTS	B0-713	1,380.50		
					86,984.53		
	COST PER 7.32 M LENGTH				86,984.53		
	RATE PER 1 M			ST1-071	11,883.13		
				SAY	11,883.15	2,192.99	9,690.16

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-072	LAYING & JOINTING 1219 MM DIA. CONCRETE PIPES (TRANSPORT AND BEDDING MATERIAL PAID SEPARATELY) [SSCM 707.3(C)-707.4]:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASON (SK/A)	2.50	DAYS	B0-001	4,750.00		
	LABOUR (S/SK)	2.50	DAYS	B0-003	4,000.00		
	LABOUR (U/SK)	9.00	DAYS	B0-004	13,746.06		
	ALLOW 2.5% ON LABOUR FOR TOOLS				562.40		
	CONC. PIPES (1219 MM LONG)	6.00	NOS.	B0-447	94,500.00		
	CONC. PIPE COLLARS	5.00	NOS.	B0-447B	12,000.00		
	ALLOW FOR GROUTING COLLARS	5.00	JOINTS	B0-714	2,467.25		

					132,025.71		

	COST PER 7.32 M LENGTH				132,025.71		
	RATE PER 1 M			ST1-072	18,036.30		
					=====		
				SAY	18,036.30	3,073.23	14,963.07
ST1-073	LAYING & JOINTING 153 MM DIA. AVAILABLE CONCRETE PIPES AND COLLARS:						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	0.67	DAY	B0-001	1,266.67		
	LABOUR (S/SK)	0.67	DAY	B0-003	1,066.67		
	LABOUR (U/SK)	1.33	DAY	B0-004	2,036.45		
	ALLOW 2.5% ON LABOUR FOR TOOLS				109.24		
	ALLOW FOR CEMENT, SAND AND WATER	2.00	JOINTS	B0-711	50.70		

					4,529.73		

	COST PER 7.32 M LENGTH				4,529.73		
	RATE PER 1 M			ST1-073	618.82		
					=====		
				SAY	618.80	596.97	21.83
ST1-074	LAYING & JOINTING 229 MM DIA. AVAILABLE CONCRETE PIPES WITH COLLARS :						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOUR (S/SK)	0.50	DAY	B0-003	800.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS				112.90		
	ALLOW FOR CEMENT, SAND AND WATER	2.00	JOINTS	B0-712	210.50		

					4,839.41		

	COST PER 7.32 M LENGTH				4,839.41		
	RATE PER 1 M			ST1--074	661.12		
					=====		
				SAY	661.10	616.94	44.16

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-075	LAYING & JOINTING 305 - 450 MM DIA. AVAILABLE CONCRETE PIPES AND COLLARS :						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	0.75	DAY	B0-001	1,425.00		
	LABOURS (S/SK)	0.75	DAY	B0-003	1,200.00		
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	ADD 2.5% ON TOOLS				122.90		
	ALLOW FOR CEMENTING COLLARS	2.00	JOINTS	B0-712	210.50		
					5,249.41		
	COST PER 7.32 M LENGTH				5,249.41		
	RATE PER 1 M			ST1-075	717.13		
				SAY	717.15	671.59	45.56
ST1-076	LAYING & JOINTING 610 MM DIA. AVAILABLE CONCRETE PIPES AND COLLARS :						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	1.50	DAYS	B0-001	2,850.00		
	LABOURS (S/SK)	1.50	DAYS	B0-003	2,400.00		
	LABOUR (U/SK)	3.00	DAYS	B0-004	4,582.02		
	ADD 2.5% ON TOOLS				245.80		
	ALLOW FOR CEMENTING COLLARS	2.00	JOINTS	B0-712	210.50		
					10,288.32		
	COST PER 7.32 M LENGTH				10,288.32		
	RATE PER 1 M			ST1-076	1,405.51		
				SAY	1,405.50	1,343.17	62.33
ST1-077	LAYING & JOINTING 914 MM DIA. AVAILABLE CONCRETE PIPES AND COLLARS :						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	1.75	DAYS	B0-001	3,325.00		
	LABOURS (S/SK)	1.75	DAYS	B0-003	2,800.00		
	LABOUR (U/SK)	6.50	DAYS	B0-004	9,927.71		
	ADD 2.5% ON TOOLS				401.32		
	ALLOW FOR CEMENTING COLLARS	5.00	JOINTS	B0-713	1,380.50		
					17,834.53		
	COST PER 7.32 M LENGTH				17,834.53		
	RATE PER 1 M			ST1-077	2,436.41		
				SAY	2,436.40	2,192.99	243.41

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-078	LAYING & JOINTING 1219 MM DIA. AVAILABLE CONCRETE PIPES AND COLLARS :						
	DATA FOR 7.32 M (UP TO 1.8 M DEPTH)						
	MASONS (SK/A)	2.50	DAYS	B0-001	4,750.00		
	LABOUR (S/SK)	2.50	DAYS	B0-003	4,000.00		
	LABOUR (U/SK)	9.00	DAYS	B0-004	13,746.06		
	ADD 2.5% ON TOOLS				562.40		
	ALLOW FOR CEMENTING COLLARS	5.00	JOINTS	B0-714	2,467.25		
					25,525.71		
	COST PER 7.32 M LENGTH				25,525.71		
	RATE PER 1 M			ST1-078	3,487.12		
				SAY	3,487.10	3,073.23	413.87
ST1-079	FIXING NEW BRIDGE PLANKS RUNNERS AND STACKING OLD PLANKS (AVAILABLE)[SSCM 1402.2(a)]:						
	DATA FOR 12 NOS.(SIZE 3.66M X .15M X .1M)						
	CARPENTER (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				247.73		
					10,157.09		
	COST FOR 12 NOS.				10,157.09		
	RATE PER 1 NO.			ST1-079	846.42		
				SAY	846.40	825.78	20.62
ST1-080	REMOVING & RE-SETTING OLD BRIDGE PLANKS.:						
	DATA FOR 12 NOS.(SIZE 3.66M X .15M X .1M)						
	CARPENTER (SK/A)	1.25	DAYS	B0-001	2,375.00		
	LABOUR (U/SK)	2.50	DAYS	B0-004	3,818.35		
	ALLOW 2.5% ON LABOUR FOR TOOLS				154.83		
					6,348.18		
	COST FOR 12 NOS.				6,348.18		
	RATE PER 1 NO.			ST1-080	529.02		
				SAY	529.00	516.11	12.89
ST1-081	SUPPLYING & FIXING NEW BRIDGE PLANKS OF CLASS I TIMBER.:						
	DATA FOR 658.8 CU.DECI M						
	CARPENTER (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				247.73		
	PLANKS (12 X 3.66M X .15M X .1M)	658.80	CU.DECI M	B0-391	91,243.80		
					101,400.89		
	COST FOR 658.8 CU.DECI M				101,400.89		
	RATE PER 1 CU.DECI M			ST1-081	153.92		
				SAY	153.90	15.04	138.86

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-082	SUPPLYING & FIXING 31 MM THICK DECK PLANKS OF CLASS I TIMBER.:						
	DATA FOR 4.5 SQ.M						
	CARPENTER (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				171.37		
	TIMBER CLASS I	139.50	CU.DECI M	B0-391	19,320.75		
					26,346.80		
	COST FOR 4.5 SQ.M				26,346.80		
	RATE PER 1 SQ.M			ST1-082	5,854.84		
				SAY	5,854.85	1,523.26	4,331.59
ST1-083	FIXING NEW CHEQUERED OR M.S. PLATES ON TIMBER - DECKED BRIDGE.[SSCM 1402.2(d)]:						
	DATA FOR 12.2 M						
	CARPENTER (SK/A)	3.00	DAYS	B0-001	5,700.00		
	LABOUR (U/SK)	6.00	DAYS	B0-004	9,164.04		
	ALLOW 2.5% ON LABOUR FOR TOOLS				371.60		
					15,235.64		
	COST FOR 12.2 METRES				15,235.64		
	RATE PER 1 METRE			ST1-083	1,248.82		
				SAY	1,248.80	1,218.36	30.44
ST1-084	REMOVING & REFIXING CHEQUERED M.S. PLATES ON TIMBER - DECKED BRIDGE.:						
	DATA FOR 12.2 M						
	CARPENTER (SK/A)	4.00	DAYS	B0-001	7,600.00		
	LABOUR (U/SK)	8.00	DAYS	B0-004	12,218.72		
	ALLOW 2.5% ON LABOUR FOR TOOLS				495.47		
					20,314.19		
	COST FOR 12.2 METRES				20,314.19		
	RATE PER 1 METRE			ST1-084	1,665.10		
				SAY	1,665.10	1,624.49	40.61
ST1-085	TIGHTENING BOLTS & NUTS OF CHEQUERED OR M.S. PLATES.:						
	DATA FOR 12.2 M						
	CARPENTER (SK/A)	1.00	DAY	B0-003	1,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				78.18		
					3,205.52		
	COST FOR 12.2 METRES				3,205.52		
	RATE PER 1 METRE			ST1-085	262.75		
				SAY	262.75	256.34	6.41

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-086	REMOVING & REFIXING 'U' CLIPS.[SSCM 1402.2(b)]:						
	DATA FOR 10 NOS.						
	CARPENTER (SK/A)	0.50	DAY	B0-001	950.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOLS				42.84		
					1,756.51		
	COST FOR 10 NOS.				1,756.51		
	RATE PER 1 NO.			ST1-086	175.65		
				SAY	175.65	171.37	4.28
ST1-087	CLEANING, WIRE BRUSHING & PAINTING STEELWORK, ONE COAT ENAMEL PAINT.:						
	DATA FOR 9.29 SQ.M						
	PAINTER (S/SK)	0.25	DAY	B0-003	400.00		
	LABOUR (U/SK)	0.75	DAY	B0-004	1,145.51		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.64		
	PAINT	0.75	LTR	B0-541	566.40		
					2,150.54		
	COST FOR 9.29 SQ.M				2,150.54		
	RATE PER 1 SQ.M			ST1-087	231.49		
				SAY	231.50	166.36	65.14
ST1-088	CLEANING, WIRE BRUSHING & APPLYING TAR ON STEELWORK, ONE COAT :						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	0.25	DAY	B0-003	400.00		
	LABOUR (U/SK)	0.75	DAY	B0-004	1,145.51		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.64		
	COAL TAR	1.13	LTR	B0-531	112.50		
					1,696.64		
	COST FOR 9.29 SQ.M				1,696.64		
	RATE PER 1 SQ.M			ST1-088	182.63		
				SAY	182.65	166.36	16.29

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-089	CLEANING, WITH COTTON WASTE AND PAINTING STEEL WORK WITH ENAMEL PAINT, ONE COAT :						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.20	DAY	B0-002	340.00		
	LABOUR (U/SK)	0.20	DAY	B0-004	305.47		
	ALLOW 2.5% ON LABOUR FOR TOOLS				16.14		
	COTTON WASTE	0.06	KG	B0-633	3.35		
	PAINT	0.75	LTR	B0-541	566.40		

					1,231.35		

	COST FOR 9.29 SQ.M				1,231.35		
	RATE PER 1 SQ.M			ST1-089	132.55		
					=====		
				SAY	132.55	69.48	63.07
ST1-090	CHIPPING TO BARE METAL ETC. & PAINTING WITH ANTICORROSIVE PAINT, ONE COAT :						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.38	DAY	B0-002	637.50		
	LABOUR (S/SK)	3.00	DAYS	B0-003	4,800.00		
	LABOUR (U/SK)	0.75	DAY	B0-004	1,145.51		
	ALLOW 2.5% ON LABOUR FOR TOOLS				164.58		
	PAINT ANTICORROSIVE	0.75	LTR	B0-542	481.76		

					7,229.34		

	COST FOR 9.29 SQ.M				7,229.34		
	RATE PER 1 SQ.M			ST1-090	778.19		
					=====		
				SAY	778.20	708.61	69.59
ST1-091	PAINTING WITH ONE COAT OF ENAMEL PAINT AFTER CLEANING, DERUSTING & APPLICATION OF ONE COAT ANTICORROSIVE PAINT.[SSCM 1401.3(c)]:						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.63	DAY	B0-002	1,062.50		
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	LABOUR (U/SK)	0.75	DAY	B0-004	1,145.51		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.20		
	PAINT ANTICORROSIVE	0.75	LTR	B0-542	481.76		
	PAINT ENAMAL	0.75	LTR	B0-541	566.40		

					4,951.37		

	COST FOR 9.29 SQ.M				4,951.37		
	RATE PER 1 SQ.M			ST1-091	532.98		
					=====		
				SAY	533.00	409.90	123.10

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-092	PAINTING WITH TWO COATS OF ENAMEL PAINT, AFTER CLEANING, DERUSTING & APPLICATION OF ONE COAT ANTICORROSIVE PAINT :						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B) (5/8 + 1/5)	0.83	DAY	B0-002	1,402.50		
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				113.25		
	COTTON WASTE	0.09	KG	B0-633	5.36		
	PAINT ANTICORROSIVE	0.75	LTR	B0-542	481.76		
	PAINT ENAMAL (.75 + .55)	1.30	LTR	B0-541	981.76		
					6,111.97		
	COST FOR 9.29 SQ.M				6,111.97		
	RATE PER 1 SQ.M			ST1-092	657.91		
				SAY	657.90	487.60	170.30
ST1-093	OILING STEEL CABLES ON SUSPENSION BRIDGES [SSCM 1405.3] :						
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				80.00		
	LUBRICANT	6.75	LTR	B0-611	3,189.97		
					6,469.97		
	COST FOR 9.29 SQ.M				6,469.97		
	RATE PER 1 SQ.M			ST1-093	696.44		
				SAY	696.45	344.46	351.99
ST1-094	CLEANING BOOMS OF STEEL BRIDGES INCLUDING SCAFFOLDING WHERE NECESSARY [SSCM 1401.3] :						
	DATA FOR 15.25 METRES						
	LABOUR (S/SK)	0.50	DAY	B0-003	800.00		
	ADD 2.5% ON TOOLS				20.00		
	ALLOW FOR SCAFFOLDING	1.00	ITEM	B0-717	171.75		
					991.75		
	COST FOR 15.25 METRES				991.75		
	RATE PER 1 METRE			ST1-094	65.03		
				SAY	65.05	52.46	12.59

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-095	DEMOLISHING UNREINFORCED CEMENT CONCRETE INCLUDING CLEANING OF DEBRIS IN FOUNDATION AND SUPERSTRUCTURE IN DRY CONDITION EXCLUDING UNDER WATER STRUCTURES [SSCM 202.2] :						
	DATA FOR 2.83 CU.M						
	LABOUR (SK/B) - SLEDGING	1.00	DAY	B0-002	1,700.00		
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	LABOUR (U/SK)-COLLECT.& TRANSP.T.	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% FOR TOOLS				195.23		
	BASKETS	1.00	NO.	B0-631	260.00		
					8,264.59		
	COST FOR 2.83 CU.M				8,264.59		
	RATE PER 1 CU.M			ST1-095	2,920.35		
				SAY	2,920.35	2,759.49	160.86
ST1-096	DEMOLISHING REINFORCED CONCRETE AND DEBRIS CLEARED :						
	DATA FOR 2.83 CU.M						
	LABOUR (SK/B) - SLEDGING	2.00	DAYS	B0-002	3,400.00		
	LABOUR (U/SK)	3.00	DAYS	B0-004	4,582.02		
	LABOUR (U/SK)-COLLECT.& TRANSP.T.	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% FOR TOOLS				275.92		
	BASKETS	1.00	NO.	B0-631	260.00		
					11,572.62		
	COST FOR 2.83 CU.M				11,572.62		
	RATE PER 1 CU.M			ST1-096	4,089.26		
				SAY	4,089.25	3,899.89	189.36
ST1-097	DEMOLISHING REINFORCED CONCRETE IN VERY HEAVY STRUCTURES BUILD UP OF GRADE 30 ABOVE CONCRETE IN WORK SUCH AS BRIDGE BEAMS & DECK SLABS, INCLUDING COLLECTING & REMOVING :						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)-COLLECT	2.00	DAYS	B0-004	3,054.68		
	ADD 2.5% OF LABOUR FOR TOOLS				76.37		
	AIR COMPRESSOR (250 C.F.M.)	8.00	HRS	B0-156	21,298.96		
	HAND HELD CONCRETE BREAKERS	2.00	DAYS	B0-157	1,242.52		
	BREAKER OPERATERS (SK/B)	3.00	DAYS	B0-002	5,100.00		
	BASKETS	1.00	NO.	B0-631	260.00		
					31,032.53		
	COST FOR 2.83 CU.M				31,032.53		
	RATE PER 1 CU.M			ST1-097	10,965.56		
				SAY	10,965.55	2,881.51	8,084.04
	* (SEE APPROVED HIRE CHARGES LIST FOR MACHINERY)						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-098	SUPPLYING & FIXING M.S. DOWELS, SPLICED AND DOVE TAILED WITH WEDGE AT ONE END, 16 MM DIA. AND 1 M LONG, BORING HOLES TO 0.3 M DEPTH IN FIXING :						
	DATA FOR 35 DOWELS						
	LABOUR (SK/B) - CUTTING	2.50	DAYS	B0-002	4,250.00		
	LABOUR (SK/B) - BORING	5.00	DAYS	B0-002	8,500.00		
	LABOUR (SK/B) - FIXING	1.00	DAY	B0-002	1,700.00		
	ADD 2.5% OF LABOUR FOR TOOLS				361.25		
	SUPPLY OF 16 MM DIA. M.S. BARS- (1 M LONG, 1.619 KG/M)	56.67	KG	B0-411	8,121.98		
					22,933.23		
	COST FOR 35 DOWELS				22,933.23		
	RATE PER 1 DOWEL			ST1-098	655.24		
				SAY	655.25	412.86	242.39
ST1-099	SUPPLYING & FIXING M.S. DOWELS, SPLICED AND DOVE TAILED WITH WEDGE AT ONE END, 20 MM DIA. AND 1 M LONG, BORING HOLES TO 0.3 M DEPTH IN FIXING :						
	DATA FOR 35 DOWELS						
	LABOUR (SK/B) - CUTTING	2.50	DAYS	B0-002	4,250.00		
	LABOUR (SK/B) - BORING	6.00	DAYS	B0-002	10,200.00		
	LABOUR (SK/B) - FIXING	1.00	DAY	B0-002	1,700.00		
	ADD 2.5% OF LABOUR FOR TOOLS				403.75		
	SUPPLY OF 20 MM DIA. M.S. BARS- (1 M LONG, 2.528 KG/M)	88.48	KG	B0-411	12,682.13		
					29,235.88		
	COST FOR 35 DOWELS				29,235.88		
	RATE PER 1 DOWEL			ST1-099	835.31		
				SAY	835.30	461.43	373.87

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-100	SUPPLYING & FIXING M.S. DOWELS, SPLICED AND DOVE TAILED WITH WEDGE AT ONE END, 25 MM DIA. AND 1 M LONG, BORING HOLES TO 0.3 M DEPTH IN FIXING :						
	DATA FOR 35 DOWELS						
	LABOUR (SK/B) - CUTTING	3.50	DAYS	B0-002	5,950.00		
	LABOUR (SK/B) - BORING	7.00	DAYS	B0-002	11,900.00		
	LABOUR (SK/B) - FIXING	1.00	DAY	B0-002	1,700.00		
	ADD 2.5% OF LAB. FOR TOOLS				488.75		
	SUPPLY OF 25 MM DIA. M.S. BARS- (1 M LONG 3.950 KG/M)	138.25	KG	B0-411	19,815.83		
					39,854.58		
	COST FOR 35 DOWELS				39,854.58		
	RATE PER 1 DOWEL			ST1-100	1,138.70		
				SAY	1,138.70	558.57	580.13
ST1-101	LAY STANDARD TYPE ROAD KERBS(125 MM WIDE X 900 MM LONG), SET ON 19 MM THICK 1:3 CEMENT MORTAR LAYER ON 150 MM X 275 MM WIDE 1:2:4(19) CONCRETE FOUNDATION WITH AVE. 157 MM X 150 MM WIDE BACKING WITH SAME CONCRETE INCLUDING EXCAVATION AND SHUTTERING. (COST OF KERB STONES INCLUDING TRANSPORT AND AGGREGATE* TRANSPORT, TO PAY SEPARATELY) :						
	DATA PER 23 METRES						
	EXCAVATION (.15X.275X23) AS PER E1-005	0.95	CU.M	E1-005	1,078.73		
	CONCRETE FOUNDATION & BACKING AS PER ST1-046 [(.15X.275)+(.144+.169)/2]X.15]X23	1.49	CU.M	ST1-046	22,718.30		
	SHUTTERING (.144+.150X2)X23 AS PER ST1-064	10.21	SQ.M	ST1-064	13,944.49		
	LABOUR SK'B' LAYING OF KERBS	1.00	DAY	B0-002	1,700.00		
	LABOUR U/SK	7.00	DAYS	B0-004	10,691.38		
	19 MM MORTAR LAYER (.125X23) AS PER ST1-032	2.88	SQ.M	ST1-032	2,467.18		
					52,600.07		
	COST PER 23 LINEAR METRES				52,600.07		
	RATE PER 1 METRE			ST1-101	2,286.96		
				SAY	2,286.95	1,077.80	1,209.15
	* QUANTITY OF AGGREGATE REQUIRED FOR CONCRETING IN 1 METRE LENGTH IS EQUAL TO : 0.06 CU.M						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-102	LAY STANDARD PRECAST BRIDGE KERBS [TYPE DRAWING NO. T/B/106-REV 1 OF RDA] (COST OF PRECAST KERBS INCLUDING TRANSPORT TO BE PAID SEPARATELY) :						
	DATA FOR 27 LM.(30 KERBS)						
A.	FIXING:						
	MASON - SK'A'	1.50	DAYS	B0-001	2,850.00		
	LABOUR - U/SK (4 NOS. X 1.5 DAYS)	6.00	DAYS	B0-004	9,164.04		
	ALLOW 2.5% OF LABOUR FOR TOOLS				300.35		
B.	CEMENT FOR JOINTING	0.50	BAG	B0-401	508.00		
					12,822.39		
	COST FOR 27 LINEAR METRES				12,822.39		
	RATE PER 1 LM			ST1-102	474.90		
				SAY	474.90	444.96	29.94
ST1-103	CONSTRUCTING 150X50 MM THICK INSITU LOWER KERB IN GRADE 20(14 MM) CONCRETE FOR BRIDGES: (AGGREGATE TRANSPORT TO BE PAID SEPARATELY)						
	DATA FOR 45 LM.						
A.	FORMWORK AS PER ST1-064	2.27	SQ.M	ST1-064	3,092.86		
B.	CONCRETE GRADE 20(14 MM)						
	CONCRETE GRADE 20(19 MM)	0.34	CU.M	ST1-047	5,050.57		
	DEDUCT COST OF 19 MM AGGREGATE (LESS PILING)	0.30	CU.M	B0-308A	(836.87)		
	ADD COST OF 12.5 MM AGGREGATE -DO-	0.30	CU.M	B0-309	836.87		
	ADD 20% OF 12.5 MM AGGR. FOR 14 MM SIZE				167.37		
C.	EXTRA LABOUR ALLOWED FOR LEVELLING AND SHAPING CURVED SURFACES:						
	MASON - SK'A'	1.00	DAY	B0-001	1,900.00		
	LABOUR - U/SK	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% OF LABOUR FOR TOOLS				85.68		
					11,823.82		
	COST FOR 45 LINEAR METRES				11,823.82		
	RATE PER 1 LM.			ST1--103	262.75		
				SAY	262.75	130.00	132.75
ST1-104	LAYING 450 X 450 X 50 MM PRECAST CONCRETE SLABS ON FOOT WALKS INCLUDING AVE. 40 MM THICK 1:3 CEMENT MORTAR BEDDING.(COST OF PRECAST SLABS AND TRANSPORT, TO PAY SEPARATELY.) :						
	DATA FOR 10 SQ.M						
(A)	MIXING CEMENT SAND MORTAR USING A MIXER FOR MIXING 6 CU.M						
	SAND FOR MORTAR BEDDING	7.64	CU.M	B0-332	30,560.00		
	CEMENT FOR MORTAR BEDDING	58.77	BAGS	B0-401	59,710.32		
	WATER FOR MIXING	6.00	CU.M	B0-781	177.60		
	CONC. MIXER (400 L) @ 50% EFFICIENCY	1.00	DAY	B0-102	7,356.32		
	LABOUR SK'B'	1.00	DAY	B0-002	1,700.00		
	LABOUR U/SK	6.00	DAYS	B0-004	9,164.04		
	ALLOW 2.5% ON LABOUR FOR TOOLS				271.60		
	COST FOR MIXING 6 CU.M				108,939.88		
	COST PER 0.4 CU.M (10 SQ.M X.04 M)			ST1-104A	7,262.66		
(B)	ALLOW CEMENT FOR GROUTNG JOINTS	0.25	BAGS	B0-401	254.00		
				ST1-104B	254.00		
(C)	LABOUR FOR LEVELLING BASE, PLACING AND GROUTING						
	LABOUR SK'A'	1.00	DAY	B0-001	1,900.00		
	LABOUR U/SK	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				200.23		
	COST FOR 10 SQ.M			ST1-104C	8,209.59		
	TOTAL COST (A+B+C)				15,726.25		
	COST PER 10 SQ.METRES				15,726.25		
	RATE PER 1 SQ.METRE			ST1-104	1,572.63		
				SAY	1,572.63	873.36	699.29

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-105	LAYING 450 X 450 X 50 MM PRECAST CONCRETE SLABS ON FOOT WALKS INCLUDING AVE. 40 MM THICK 1:3 CEMENT MORTAR BEDDING.(COST OF PRECAST SLABS AND TRANSPORT, TO PAY SEPARATELY.) :						
	DATA FOR 10 SQ.M						
(A)	SAND FOR SAND BEDDING 40 MM THICK	0.40	CU.M	B0-332 ST1-105A	1,600.00 1,600.00		
(B)	ALLOW CEMENT FOR GROUTNG JOINTS	0.25	BAGS	B0-401 ST1-105B	254.00 254.00		
(C)	LABOUR FOR LEVELLING BASE, PLACING AND GROUTING	1.00	DAY	B0-001	1,900.00		
	LABOUR SK'A'	4.00	DAYS	B0-004	6,109.36		
	LABOUR U/SK				200.23		
	ALLOW 2.5% ON LABOUR FOR TOOLS				200.23		
	COST FOR 10 SQ.M			ST1-105C	8,209.59		
	TOTAL COST (A+B+C)				10,063.59		
	COST PER 10 SQ.METRES				10,063.59		
	RATE PER 1 SQ.METRE			ST1-105	1,006.36		
				SAY	1,006.35	800.94	205.41
ST1-106	FIXING PRE CAST HAND RAILING AND UPRIGHTS USING GRADE 25(19) CONCRETE INCLUDING FORM WORK FOR POCKETS. (COST OF THE PRE CAST ITEMS INCLUDING TRANSPORT AND AGGREGATE* TRANSPORT, TO PAY SEPARATELY.) [TYPE DRAWING NO. T/B/102/B]						
	DATA FOR 13.8 METRES (6 BAYS)						
	NUMBER OF UPRIGHTS	16.00	NOS.				
	FORM WORK (.340+ .230)X2X.2X16) AS PER ST1-064	3.65	SQ.M	ST1-064	4,981.34		
	G25 CONCRETE FOR FIXING UP RIGHTS	0.25	CU.M	ST1-048	4,070.98		
	LABOUR SK'A' (MASON)	2.00	DAYS	B0-001	3,800.00		
	LABOUR U/SK	4.00	DAYS	B0-004	6,109.36		
					18,961.68		
	COST PER 13.8 LINEAR METRES				18,961.68		
	RATE PER 1 METRE			ST1-106	1,374.04		
				SAY	1,374.05	936.00	438.05
	* QUANTITY OF AGGREGATE REQUIRED FOR CONCRETING IN 1 METRE LENGTH IS EQUAL TO : 0.017 CU.M						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-107	CONSTRUCTION OF R.C.C. GRADE 25(19 MM) END PILLASTER, TYPE I.(AGGR. TRANSPORT AND IRON PILING TO BE PAID SEPARATELY) [TYPE DRAWING NO. T/B/106-REV 1] :						
	DATA FOR 1 END PILLASTER:						
A.	EXCAVATION FOR FOUNDATION: 2.0X.5X.525 M	0.53	CU.M	E1-012	742.14		
B.	CONCRETE SCREED: CONCRETE 1:3:6(37.5 MM) 2X.5X.075 M	0.08	CU.M	ST1-040	1,015.57		
	FOUNDATION: GRADE 25(19 MM) CONCRETE (2X.5X.3)+(2X.35X.35) M	0.55	CU.M	ST1-048	8,866.22		
	PILLASTER: CONCRETE GRADE 25(19 MM)						
	1.4X.35X.15 M +	0.07					
	1.35X.3X.95 M +	0.38					
	1.4X.35X.1 M +	0.05					

		0.51	CU.M	ST1-048	8,252.10		
C.	FORMWORK SHUTTERING FOR FOUNDATION: 2X2X.375 2X.5X.375 2X2X.35 2X.35X.35	1.50 0.38 1.40 0.25					

		3.52	SQ.M	ST1-064	4,806.56		
	SMOOTH SHUTTERING FOR PILLASTER(65%): 2X1.4X.3X65% 2X.35X.3X65% 2X1.35X.95X65% 2X.3X.95X65% 2X.025X1.4X65% 2X.025X.3X65%	0.55 0.14 1.67 0.37 0.05 0.01					

		2.78	SQ.M	ST1-065	5,053.91		
D.	TOR STEEL REINFORCEMENT FABRICATION: 12 MM DIA. - 24.6 M X .910 KG/M 10 MM DIA. - 52.97 M X .641 KG/M	22.39 33.95					

		56.34	KG	ST1-055	19,186.51		
E.	LABOUR & MATERIALS FOR MAKING OF COPING AND PLINTH: MASON - SK'A' FOR MATERIALS - ADD 1% OF CONCRETE FOR PILLASTER	0.25	DAY	B0-001	475.00		
					82.52		

					48,480.52		

	TOTAL COST				48,480.52		
	RATE PER 1 END PILLASTER			ST1-107	48,480.52		
					=====		
				SAY	48,480.50	13,240.83	35,239.67
*	AGGREGATE QUANTITIES REQUIRED:	37.5 MM	- 0.08 CU.M				
		19 MM	- 0.95 CU.M				

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-108	CONSTRUCTION OF R.C.C. GRADE 25(19 MM) END PILLASTER, TYPE II.(AGGR. TRANSPORT AND IRON PILING TO BE PAID SEPARATELY) [TYPE DRAWING NO. T/B/106-REV 1] :						
	DATA FOR 1 END PILLASTER:						
A.	EXCAVATION FOR FOUNDATION: 2.0X.6X.775 M	0.93	CU.M	E1-012	1,314.65		
B.	CONCRETE SCREED: CONCRETE 1:3:6(37.5 MM) 2X.6X.075 M	0.09	CU.M	ST1-040	1,218.68		
	FOUNDATION: GRADE 25(19 MM) CONCRETE (2X.6X.3)+(2X.35X.6) M	0.78	CU.M	ST1-048	12,689.27		
	PILLASTER: CONCRETE GRADE 25(19 MM) 1.4X.35X.15 M + 1.35X.3X.95 M + 1.4X.35X.1 M +	0.07 0.38 0.05					
		0.51	CU.M	ST1-048	8,252.10		
C.	FORMWORK SHUTTERING FOR FOUNDATION: 2X2X.375 2X.6X.375 2X2X.6 2X.35X.6	1.50 0.45 2.40 0.42					
		4.77	SQ.M	ST1-064	6,513.44		
	SMOOTH SHUTTERING FOR PILLASTER(65%): 2X1.4X.3X65% 2X.35X.3X65% 2X1.35X.95X65% 2X.3X.95X65% 2X.025X1.4X65% 2X.025X.3X65%	0.55 0.14 1.67 0.37 0.05 0.01					
		2.78	SQ.M	ST1-065	5,053.91		
D.	TOR STEEL REINFORCEMENT FABRICATION: 12 MM DIA. - 13.10 M X .910 KG/M 10 MM DIA. - 62.57 M X .641 KG/M	11.92 40.11					
		52.03	KG	ST1-055	17,718.26		
E.	LABOUR & MATERIALS FOR MAKING OF COPING AND PLINTH: MASON - SK'A' FOR MATERIALS -	0.25	DAY	B0-001	475.00		
	ADD 1% OF CONCRETE FOR PILLASTER				82.52		
					53,317.82		
	TOTAL COST				53,317.82		
	RATE PER 1 END PILLASTER			ST1-108	53,317.82		
				SAY	53,317.80	15,037.47	38,280.33
*	AGGREGATE QUANTITIES REQUIRED:	37.5 MM 19 MM	- 0.09 CU.M - 1.16 CU.M				

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-109	CONSTRUCTION OF R.C.C. GRADE 25(19 MM) END PILLASTER, TYPE III.(AGGR. TRANSPORT AND BUILTUP RUBBLE FOUNDATION TO BE PAID SEPARATELY) [TYPE DRAWING NO. T/B/106-REV 1] :						
	DATA FOR 1 END PILLASTER:						
A.	CONCRETE FOUNDATION OVER BUILTUP RUBBLE MASONRY: GRADE 25(19 MM) CONCRETE 1.45X.6X.3 M	0.26	CU.M	ST1-048	4,246.03		
	PILLASTER: CONCRETE GRADE 25(19 MM)	0.07			0.38		
	1.4X.35X.15 M +	0.38			0.05		
	1.35X.3X.95 M +	0.05					
	1.4X.35X.1 M +	0.51	CU.M	ST1-048	8,252.10		
B.	FORMWORK SHUTTERING FOR FOUNDATION: 2X1.45X.3 2X.6X.3	0.87			0.36		
		1.23	SQ.M	ST1-064	1,679.57		
	SMOOTH SHUTTERING FOR PILLASTER(65%):						
	2X1.4X.3X65%	0.55					
	2X.35X.3X65%	0.14					
	2X1.35X.95X65%	1.67					
	2X.3X.95X65%	0.37					
	2X.025X1.4X65%	0.05					
	2X.025X.3X65%	0.01					
		2.78	SQ.M	ST1-065	5,053.91		
C.	TOR STEEL REINFORCEMENT FABRICATION: 12 MM DIA. - 10.75 M X .910 KG/M 10 MM DIA. - 36.49 M X .641 KG/M	9.78			23.39		
		33.17	KG	ST1-055	11,296.93		
D.	LABOUR & MATERIALS FOR MAKING OF COPING AND PLINTH: MASON - SK'A' FOR MATERIALS -	0.25	DAY	B0-001	475.00		
	ADD 1% OF CONCRETE FOR PILLASTER				82.52		
					31,086.04		
	TOTAL COST				31,086.04		
	RATE PER 1 END PILLASTER			ST1-109	31,086.04		
				SAY	31,086.05	8,303.35	22,782.70
*	AGGREGATE QUANTITIES REQUIRED:	19 MM -	0.70 CU.M				

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-110	CONSTRUCTION OF R.C.C. GRADE 25(19 MM) END PILLASTER, TYPE IV.(AGGR. TRANSPORT TO BE PAID SEPARATELY) [TYPE DRAWING NO. T/B/106-REV 1] :						
	DATA FOR 1 END PILLASTER:						
A.	CONCRETE FOUNDATION OVER WINGWALL STRUCTURE: GRADE 25(19 MM) CONCRETE 1.45X.6X.3 M	0.26	CU.M	ST1-048	4,246.03		
	PILLASTER: CONCRETE GRADE 25(19 MM)	0.07			0.38		
	1.4X.35X.15 M +	0.38			0.05		
	1.35X.3X.95 M +	0.05					
	1.4X.35X.1 M +	0.51	CU.M	ST1-048	8,252.10		
B.	FORMWORK SHUTTERING FOR FOUNDATION: 2X1.45X.3 2X.6X.3	0.87			0.36		
		1.23	SQ.M	ST1-064	1,679.57		
	SMOOTH SHUTTERING FOR PILLASTER(65%):						
	2X1.4X.3X65%	0.55			0.14		
	2X.35X.3X65%	0.14			1.67		
	2X1.35X.95X65%	1.67			0.37		
	2X.3X.95X65%	0.37			0.05		
	2X.025X1.4X65%	0.05			0.01		
	2X.025X.3X65%	0.01					
		2.78	SQ.M	ST1-065	5,053.91		
C.	TOR STEEL REINFORCEMENT FABRICATION: 12 MM DIA. - 10.75 M X .910 KG/M 10 MM DIA. - 36.49 M X .641 KG/M 16 MM DIA. - 4.8 M X 1.619 KG/M	9.78			23.39		
		7.77					
		40.94	KG	ST1-055	13,943.41		
D.	LABOUR & MATERIALS FOR MAKING OF COPING AND PLINTH: MASON - SK'A' FOR MATERIALS -	0.25	DAY	B0-001	475.00		
	ADD 1% OF CONCRETE FOR PILLASTER				82.52		
					33,732.52		
	TOTAL COST				33,732.52		
	RATE PER 1 END PILLASTER			ST1-110	33,732.52		
				SAY	33,732.50	8,847.34	24,885.16
*	AGGREGATE QUANTITIES REQUIRED:	19 MM -	0.70 CU.M				

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-111	LAYING OF GRADE 20 CONCRETE PRECAST PIN KERBS IN GRADE 20(19) CONCRETE FOUNDATION AS EDGING : (AGGREGATE TRANSPORT TO BE PAID SEPARATELY)						
	DATA FOR 30 NOS. EQUIVALENT TO	18.00	METERS				
A.	CONCRETE FOR PIN KERB .075X.15X.6X30 NOS	0.20	CU.M	ST1-047	3,030.34		
B.	FORMWORK AS PER ST1-057 & 15 USES ADD 1% OF FORMWORK COST FOR CASTING BED	0.54	SQ.M	ST1-057	712.88 7.13		
C.	EXCAV. FOR FOUND. E1-012 (1X.2X.6X30)	0.36	CU.M	E1-012	508.90		
D.	CONCRETE FOR FOUNDATION AS PER ST1-047 LESS ((.1X.22X.6)-(0.075X.075X.6))X30	0.29	CU.M	ST1-047	4,410.83		
E.	FORMWORK AS PER ST1-064 & 50 USES	0.22	SQ.M	ST1-064	294.95		
F.	PLACING PIN KERBS AND INTERNAL TRANSPORT LABOUR SK'B'	2.00	DAY	B0-003	3,200.00		
	LABOUR US/K	1.00	DAY	B0-004	1,527.34		
	ADD 2.5% OF LABOUR FOR TOOLS				118.18		
					13,810.55		
	TOTAL COST FOR 18 M				13,810.55		
	RATE PER 1 METER LENGTH			ST1-111	767.25		
				SAY	767.25	392.37	374.88
*	AGGRGATE REQUIRED PER 1 M FOR PIN KERB - 0.01 CU.M & FOR FOUNDATION - 0.02 CU.M						

HSR - 2021
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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-112	SUPPLYING AND FIXING 25 MM THICK TONGUE & GROOVED PLANKS WITH 50X50 MM STRUTS OF CLASS I TIMBER IN PANELS AS SMOOTH SHUTTERING FOR CONCRETE DRAINS :						
	DATA FOR LENGTH OF DRAIN 5.49 M & AREA	13.38	SQ.M				
	NUMBER OF USES ASSUMED	12.00	TIMES				
A.	CLASS I TIMBER INCLUDING 10% FOR WASTAGES						
	25MM PLANKS 4X3X1.83X.61X.025	334.89					
	50X50 MM SECTIONS 4X2X3X1.83X.050X.050	109.80					
	50X50 MM SECTIONS 4X4X3X.61X.050X.050	73.20					
	50X50 MM PLANKS 4X.61X.15X.025 (4 ENDS)	9.15					
	50X25 MM SECTIONS 4X3X.75X.050X.025	11.25					
	50X25 MM SECTIONS 4X3X.45X.050X.025	6.75					
		545.04					
	ADD 10 % FOR WASTAGES	54.50					
	TOTAL TIMBER	599.54	CU.DECI M	B0-391	83,036.84		
	FABRICATION & FOR NECESSARY REPAIRS						
	LABOUR SK'A'	3.00	DAY	B0-001	5,700.00		
	LABOUR S/SK	6.00	DAY	B0-003	9,600.00		
	ADD 2.5 % OF LABOUR FOR TOOLS				382.50		
	WIRE NAILS	2.00	KG	B0-432	391.90		
					99,111.24		
	COST OF SHUTTERING FOR 13.38 SQ.M FOR 12 USES				99,111.24		
	COST FOR 13.38 SQ.M PER 1 USE			ST1-112A	8,259.27		
B.	ASSEMBLING AND DIS-ASSEMBLING OF SHUTTERING						
	LABOUR SK'A'	1.50	DAY	B0-001	2,850.00		
	LABOUR S/SK	3.00	DAY	B0-003	4,800.00		
	ADD 2.5 OF LABOUR FOR TOOLS				191.25		
	MOULD OIL	1.67	LTR	B0-602	71.60		
	WIRE NAILS	0.80	KG	B0-432	156.76		
					8,069.61		
	COST OF ASSEMBLING & REMOVING OF 13.38 SQ.M			ST1-112B	8,069.61		
	TOTAL COST FOR 13.38 SQ.M PER USE				16,328.88		
	COST PER 1 SQ.M PER USE			ST1-112	1,219.95		
				SAY	1,219.95	643.01	576.94
ST1-113	SUPPLY AND PACKING 50 - 200 MM DRY STONE LINING BEHIND ABUTMENTS AND WING WALLS : (AGGREGATE TRANSPORT TO PAY SEPARATELY)						
	DATA FOR 1 CU.M						
	AGGREGATE RUBBLE (LESS PILING)	0.50	CU. M	B0-302	903.95		
	AGGREGATE 100 MM (LESS PILING)	0.20	CU. M	B0-303	289.05		
	AGGREGATE 75 MM (LESS PILING)	0.20	CU. M	B0-304	253.71		
	AGGREGATE 50 MM (LESS PILING)	0.10	CU. M	B0-305	149.82		
	COST OF PACKING (AS PER ST1-011)	1.00	CU. M	ST1-011	998.70		
					2,595.24		
	ADD 10% ON COST OF AGG. 100MM & BELOW ANDFOR FILLING VOIDS				119.19		
					2,714.43		
	COST PER 1 CU. M			ST1-113	2,714.43		
				SAY	2,714.45	944.47	1,769.98

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-114	LAYING GEOTEXTILE ON PREPARED SURFACE (SUPPLY AND TRANSPORT TO PAY SEPARATELY)						
	DATA FOR 87.75 SQ.M						
	LABOUR U/SK	2.00	DAYS	B0-004	3,054.68		
	LABOUR SK 'B'	1.00	DAYS	B0-002	1,700.00		
	ADD 2.5% OF LABOUR FOR TOOLS				118.87		
	TOTAL FOR 87.75 SQ.M				4,873.55		
	RATE PER 1 SQ.M			ST1-114	55.54		
				SAY	=====	54.18	1.37
					55.55		
ST1-115	CONSTRUCTION OF GABION WALL USING 4X1X1M MESH ON PREPARED GROUND. (SUPPLY AND TRANSPORT OF GABION MESH TO BE PAID SEPARATELY) :						
	DATA FOR 16 CU.M (4/4.0X1.0X1.0 M) OF GABION						
A	FABRICATING GABION BOX						
	LABOUR U/SK	1.00	DAY	B0-004	1,527.34		
	LABOUR S/SK	0.50	DAY	B0-003	800.00		
	LABOUR SK 'B'	0.50	DAY	B0-002	850.00		
	ADD 2.5% OF LABOUR FOR TOOLS				79.43		
					3,256.77		
B	PLACING AND FIXING GABION BOXES						
	LABOUR U/SK	5.33	DAY	B0-004	8,140.72		
	LABOUR S/SK	0.89	DAY	B0-003	1,424.00		
	LABOUR SK 'B'	1.33	DAY	B0-002	2,261.00		
	ADD 2.5% OF LABOUR FOR TOOLS				295.64		
					12,121.37		
C	PACKING RUBBLE INCLUDING SUPPLY						
	LABOUR U/SK	15.55	DAY	B0-004	23,750.14		
	LABOUR S/SK	2.80	DAY	B0-003	4,480.00		
	LABOUR SK 'B'	5.91	DAY	B0-002	10,047.00		
	ADD 2.5% OF LABOUR FOR TOOLS				956.93		
	RUBBLE	20.00	CU.M	B0-301	34,000.00		
					73,234.07		
	TOTAL COST FOR 16 CU.M			(A+B+C)	88,612.20		
	RATE PER CU.M			ST1-115	5,538.26		
				SAY	=====	3,330.01	2,208.24
					5,538.25		

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-116	CONSTRUCTION OF GABION WALL USING 4X1X0.5 M MESH ON PREPARED GROUND. (SUPPLY AND TRANSPORT OF GABION MESH TO BE PAID SEPARATELY) :						
	<u>DATA FOR 12 CU.M (6/4.0X1.0X0.5 M) OF GABION</u>						
A	FABRICATING GABION BOX						
	LABOUR U/SK	1.00	DAY	B0-004	1,527.34		
	LABOUR S/SK	0.50	DAY	B0-003	800.00		
	LABOUR SK 'B'	0.50	DAY	B0-002	850.00		
	ADD 2.5% OF LABOUR FOR TOOLS				79.43		
					3,256.77		
B	PLACING AND FIXING GABION BOXES						
	LABOUR U/SK	6.67	DAY	B0-004	10,187.36		
	LABOUR S/SK	0.83	DAY	B0-003	1,328.00		
	LABOUR SK 'B'	0.83	DAY	B0-002	1,411.00		
	ADD 2.5% OF LABOUR FOR TOOLS				323.16		
					13,249.52		
C	PACKING RUBBLE INCLUDING SUPPLY						
	LABOUR U/SK	11.66	DAY	B0-004	17,808.78		
	LABOUR S/SK	2.10	DAY	B0-003	3,360.00		
	LABOUR SK 'B'	4.43	DAY	B0-002	7,531.00		
	ADD 2.5% OF LABOUR FOR TOOLS				717.49		
D	RUBBLE	15.00	CU.M	B0-301	25,500.00		
					54,917.28		
	TOTAL COST FOR 12 CU.M			(A+B+C)	71,423.57		
	RATE PER CU.M			ST1-116	5,951.96		
				SAY	5,951.95	3,733.62	2,218.33
ST1-117	CONSTRUCTION OF KERB INLET AS PER DRAWING TYPE - K1/T1 WITH COVER SLABS. AGGREGATE TRANSPORT TO PAY SEPARATELY						
	<u>DATA FOR 1.2 M LENGTH</u>						
	1. CONCRETE						
	INLET CHANNEL BASE (.8X1.2X.1)	0.10					
	INLET CHANNEL WALLS (2X.2X.1X1.2)	0.05					
	BASE PARALLEL TO KERB EDGE (3.1X.1X.2)	0.06					
	COVER SLABS 2 NOS (2X.6X.8X.115)	0.11					
	TOTAL CONCRETE 1:2:4(19)	0.32	CU.M	ST1-047	4,734.82		
	2. FORM WORK						
	WALL (2X.3X1.2)+(2X.2X1.2)	1.20					
	SLAB (2X2X.8X.115)+(2X2.6X.115)	0.64					
	TOTAL FORM WORK	1.84	SQ.M	ST1-064	2,517.98		
	3. REINFORCEMENT TOR STEEL						
	AS PER THE BAR SCHEDULE IN TYPE DRAWING	8.04	KG	ST1-055	2,738.02		
	4. ALLOW CASTING BED COST 3% OF FORM WORK COST						
							75.54
	5. PLACING 2 NO. SLABS INCLUDING LEVELLING						
	4 U/SK IN 1 HOUR	0.50	DAY	B0-004	763.67		
	TRACTOR & TRAILER FOR TRANSPORT	0.05	DAY	B0-117	321.65		
	TOTAL COST FOR 1.2 M KERB INLET PIT				11,151.68		
	RATE PER 1 KERB INLET PIT WITH 1.2 M LENGTH			ST1-117	11,151.68		
				SAY	11,151.70	3,425.56	7,726.14
	NOTE: EARTH EXCAVATION TO CONSIDER BY ENGINEER AS PER SITE CONDITION AND ADD SEPARATELY IF REQUIRED						

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ITEMS RESERVED FOR BRIDGE WORKS ONLY							
THE RATES IN THE FOLLOWING ITEMS FROM ST1-118 TO ST1-120 SHOULD BE ADDED TO THE CONCRETE RATE SELECTED FROM ITEMS ST1-038 TO ST1-050, DEPENDING ON THE STRUCTURAL LOCATION							
ST1-118	ADDITIONAL LABOUR FOR POURING, COMPACTING AND LEVELLING CONCRETE IN SCREED UNDER FOUNDATION SLAB						
	<u>DATA FOR 1 CU.M</u>						
	LABOUR SK'A' MASON	0.13	DAY	B0-001	237.50		
	LABOUR S/SK	0.33	DAY	B0-003	533.33		
					770.83		
	TOTAL COST PER 1 CU.M.			ST1-118	770.83		
				SAY	770.85	770.85	0.00
ST1-119	ADDITIONAL LABOUR FOR POURING AND COMPACTING CONCRETE IN ABUTMENTS, WINGWALLS, CAPPING BEAMS OF PIERS AND FOOT WALKS OF BRIDGES						
	<u>DATA FOR</u>	8.50	CU.M				
	LABOUR SK'A' CARPENTER	1.00	DAY	B0-001	1,900.00		
	TOTAL COST PER 8.5 CU.M.				1,900.00		
	TOTAL COST PER 1 CU.M.			ST1-119	223.53		
				SAY	223.55	223.55	0.00
ST1-120	ADDITIONAL LABOUR FOR POURING, COMPACTING AND LEVELLING INFILLER CONCRETE BETWEEN BRIDGE BEAMS INCLUDING SCREED OF BRIDGE DECKS.						
	<u>DATA FOR 1 CU.M</u>						
	LABOUR SK'A' CARPENTER	0.33	DAY	B0-001	627.00		
	LABOUR U/SK	0.33	DAY	B0-004	504.02		
					1,131.02		
	TOTAL COST PER 1 CU.M.			ST1-120	1,131.02		
				SAY	1,131.00	1,131.00	0.00
ST1-121	LAYING READY MIXED GRADE CONCRETE INCLUDING VIBRATION.* (SUPPLY OF CONCRETE TO BE PAID SEPARATELY)						
	<u>DATA FOR</u>	8.50	CU.M				
	LABOUR SK'A'	2.00	DAY	B0-001	3,800.00		
	LABOUR S/SK	3.00	DAY	B0-003	4,800.00		
	LABOUR U/SK	2.00	DAY	B0-004	3,054.68		
	ADD 2.5% OF LABOUR FOR TOOLS				291.37		
	HIRE OF PORKER VIBRATER	1.00	DAY	B0-106	2,318.71		
	TOTAL COST PER 8.5 CU.M.				14,264.76		
	TOTAL COST PER 1 CU.M.			ST1-121	1,678.21		
				SAY	1,678.20	1,371.14	307.06

* Additional labour to be considered depending on the location of concreting.

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-122	SUPPLYING AND LAYING APPROVED HARD RUBBER BEARING PADS 75MM X 12 MM OVER CAPPING BEAMS AND UNDER THE APPROACH SLABS						
	<u>DATA FOR</u>	19.60	METRES				
	LABOUR SK'A' CARPENTER	0.50	DAY	B0-001	950.00		
	LABOUR U/SK	0.50	DAY	B0-004	763.67		
	ADD 2.5% OF LABOUR FOR TOOLS				42.84		
	HARD RUBBER BEARING PADS 75 MMX 12 MM	19.60	METRES	B0-638	26,088.58		
	TOTAL COST PER 8.5 CU.M.				27,845.09		
	TOTAL COST PER 1 M.			ST1-122	1,420.67		
					=====		
				SAY	1,420.65	87.43	1,333.22
ST1-123	BITUMENOUS SEALING MATERIAL SUPPLIED AND LAID UNDER BEAM ENDS TO PREVENT GROUT LEAK ON TO CAPPING BEAM TRANSPORT OF EMULSION INCLUDED:						
	<u>DATA FOR</u>	10.00	METRES				
	VOLUME OF SAND EMULSION MIX 1:8 (0.1 X 0.05 X 15)	0.05	CU.M				
	LABOUR FOR MIXING AND LAYING 2 S/SK FOR 2 HOURS	0.50	DAY	B0-003	800.00		
	ADD 2.5% OF LABOUR FOR TOOLS				20.00		
	EMULSION CSS-1	3.00	LITRES	B0-352	280.05		
	RIVER SAND	0.06	CU.M	B0-332	220.00		
	ALLOW 5% EMULSION FOR TRANSPORT	1.00	ITEM		14.00		
	TOTAL COST PER 10 M.				1,334.05		
	TOTAL COST PER 1 M.			ST1-123	133.41		
					=====		
				SAY	133.40	80.00	53.40
ST1-124	150 MM DIA. POLYTHENE DISPLACERS SUPPLIED AND FILLED WITH SAW DUST OR SIMILAR LIGHT MATERIAL IN DECK. TRANSPORT OF SAW DUST TO PAY SEPARATELY:						
	<u>DATA FOR</u>	50.00	METRES				
	POLYTHENE TUBE LENGTH/KG	28.00	METRES				
	ASSUME 50% COMPACTION						
	VOLUME OF SAW DUST	1.33	CU.M				
	LABOUR U/SK FILLING	0.50	DAY	B0-004	763.67		
	LABOUR U/SK LOADING FOR TRANSPORT	0.13	DAY	B0-004	190.92		
	ADD 2.5% OF LABOUR FOR TOOLS				23.86		
	COST OF SAW DUST	1.33	CU.M	B0-648	169.64		
	POLYTHENE TUBE	1.96	KG	B0-639B	642.88		
	BASKET	0.33	NO	B0-631	86.67		
	BINDING WIRE	0.75	KG	B0-431	177.23		
	TOTAL COST PER 50 M.				2,054.87		
	TOTAL COST PER 1 M.			ST1-124	41.10		
					=====		
				SAY	41.10	19.09	22.01

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-125	230 MM DIA. POLYTHENE DISPLACERS SUPPLIED AND FILLED WITH SAW DUST OR SIMILAR LIGHT MATERIAL IN DECK. TRANSPORT OF SAW DUST TO PAY SEPARATELY:						
	<u>DATA FOR</u>	50.00	METRES				
	POLYTHENE TUBE LENGTH/KG	20.00	METRES				
	ASSUME 50% COMPACTION						
	<u>VOLUME OF SAW DUST</u>	3.12	CU.M				
	LABOUR U/SK FILLING	1.00	DAY	B0-004	1,527.34		
	LABOUR U/SK LOADING FOR TRANSPORT	0.25	DAY	B0-004	381.84		
	ADD 2.5% OF LABOUR FOR TOOLS				47.73		
	COST OF SAW DUST	3.12	CU.M	B0-648	397.96		
	POLYTHENE TUBE	2.75	KG	B0-639A	902.00		
	BASKET	0.33	NO	B0-631	86.67		
	BINDING WIRE	0.75	KG	B0-431	177.23		
	TOTAL COST PER 50 M.				3,520.75		
	TOTAL COST PER 1 M.			ST1-125	70.42		
				SAY	70.40	38.18	32.22
ST1-126	325 MM DIA. POLYTHENE DISPLACERS SUPPLIED AND FILLED WITH SAW DUST OR SIMILAR LIGHT MATERIAL IN DECK. TRANSPORT OF SAW DUST TO PAY SEPARATELY:						
	<u>DATA FOR</u>	50.00	METRES				
	POLYTHENE TUBE LENGTH/KG	14.00	METRES				
	ASSUME 50% COMPACTION						
	<u>VOLUME OF SAW DUST</u>	6.22	CU.M				
	LABOUR U/SK FILLING	1.50	DAY	B0-004	2,291.01		
	LABOUR U/SK LOADING FOR TRANSPORT	0.50	DAY	B0-004	763.67		
	ADD 2.5% OF LABOUR FOR TOOLS				76.37		
	COST OF SAW DUST	6.22	CU.M	B0-648	793.36		
	POLYTHENE TUBE	3.93	KG	B0-639	1,289.04		
	BASKET	0.50	NO	B0-631	130.00		
	BINDING WIRE	0.75	KG	B0-431	177.23		
	TOTAL COST PER 50 M.				5,520.67		
	TOTAL COST PER 1 M.			ST1-126	110.41		
				SAY	110.40	61.09	49.31
ST1-127	PCC BEAMS 16.15M LONG LAUNCHED INTO POSITION						
	<u>DATA FOR</u>	16.00	NOS				
	LABOUR SK'A'	4.00	DAY	B0-001	7,600.00		
	LABOUR U/SK	32.00	DAY	B0-004	48,874.88		
	ALLOW 2.5% FOR TOOLS				1,411.87		
	MOBILE CRANE 25 TON	24.00	HOUR	B0-146	205,878.96		
	TOTAL COST 16 BEAMS				263,765.71		
	RATE PER 1 NO.			ST1-127	16,485.36		
				SAY	16,485.35	3,529.68	12,955.67
ST1-128	PCC BEAMS 13.41M AND 12.19M LONG LAUNCHED INTO POSITION						
	<u>DATA FOR</u>	8.00	NOS				
	LABOUR SK'A'	1.00	DAY	B0-001	1,900.00		
	LABOUR S/SK	4.00	DAY	B0-004	6,109.36		
	ADD 2.5% OF LABOUR FOR TOOLS				200.23		
	MOBILE CRANE	8.00	HOUR	B0-146A	86,965.20		
	TOTAL COST 8 BEAMS				95,174.79		
	RATE PER 1 NO.			ST1-128	11,896.85		
				SAY	11,896.85	1,001.17	10,895.68

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-129	PCC BEAMS 10.67M, 9.75M AND 8.23M LONG LAUNCHED INTO POSITION						
	DATA FOR	16.00	NOS				
	LABOUR SK'A'	2.00	DAY	B0-001	3,800.00		
	LABOUR U/SK	16.00	DAY	B0-004	24,437.44		
	ALLOW 2.5% FOR TOOLS				705.94		
	MOBILE CRANE 25 TON	13.00	HOUR	B0-146	111,517.77		
	TOTAL COST 16 BEAMS				140,461.15		
	RATE PER 1 NO.			ST1-129	8,778.82		
				SAY	8,778.80	1,764.84	7,013.96
ST1-130	PCC BEAMS 7.01M, 6.09M, 5.18M, 4.26M AND 3.35M LONG LAUNCHED INTO POSITION						
	DATA FOR	16.00	NOS				
	LABOUR SK'A'	1.50	DAY	B0-001	2,850.00		
	LABOUR U/SK	12.00	DAY	B0-004	18,328.08		
	ALLOW 2.5% FOR TOOLS				529.45		
	MOBILE CRANE 25 TON	10.00	HOUR	B0-146	85,782.90		
	TOTAL COST 16 BEAMS				107,490.43		
	RATE PER 1 NO.			ST1-130	6,718.15		
				SAY	6,718.15	1,323.63	5,394.52
ST1-131	M.S. ANGLE IRON AND HARD RUBBER EXPANSION JOINTS AS PER DRAWING NO. T/B/107 REV.1						
	DATA FOR	9.80	M				
	A FABRICATING M.S. ANGLE						
	LABOUR SK'A'	0.50	DAY	B0-001	950.00		
	LABOUR U/SK	0.50	DAY	B0-004	763.67		
	B PREPARING M.S. STUDS						
	LABOUR SK'A'	1.00	DAY	B0-001	1,900.00		
	LABOUR U/SK	2.00	DAY	B0-004	3,054.68		
	C PRPARING DOVETAILED M.S. RODS						
	LABOUR SK'A'	1.00	DAY	B0-001	1,900.00		
	LABOUR U/SK	2.00	DAY	B0-004	3,054.68		
	D PRPARING M.S. LUGS						
	LABOUR SK'A'	1.50	DAY	B0-001	2,850.00		
	LABOUR U/SK	3.00	DAY	B0-004	4,582.02		
	E FOR PAINTING						
	LABOUR S/SK	1.00	DAY	B0-003	1,600.00		
	F FOR FIXING ANGLE IRON, ALLUMINIUM SHEET & RUBBER						
	LABOUR SK'A'	2.00	DAY	B0-001	3,800.00		
	LABOUR U/SK	4.00	DAY	B0-004	6,109.36		
	G FOR FILLING BITUMINOUS MATERIAL						
	LABOUR S/SK	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% FOR TOOLS				804.11		
	WELDING PLANT WITH GENERATOR	1.00	DAY	B0-105	15,157.73		
	ALLOW FOR WELDING ACCESSORIES				200.00		
	M.S.ANGLE 50X50X6 MM CONSIDERING 10% WASTAGE	10.78	METRE	B0-641	7,298.60		
	M.S. STUDS	2.17	KG	B0-411	311.03		
	M.S. RODS	2.17	KG	B0-411	311.03		
	M.S. PLATE 12MM THICK FOR M.S. LUGS	0.06	SQ.M	B0-642	974.45		
	75X12 MM RUBBER PAD	9.80	METRE	B0-638	13,044.29		
	ALLUMINIUM SHEET 24 SWG	1.72	SQ.M	B0-640	1,882.54		
	ADHESIVE (WATER RESISTANT)	0.50	KG	B0-643	679.08		
	ALLOW FOR BITUMINOUS FILLER	0.02	CU.M	MS1-019A	383.88		
	PAINT ANTICORROSIVE	1.00	LITRE	B0-542	642.35		
	TOTAL COST PER 9.8 M.				73,853.50		
	TOTAL COST PER 1 M.			ST1-131	7,536.07		
				SAY	7,536.05	3,290.78	4,245.27

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-132	TRANSPORT OF 355 X355X9144 MM R.C.C. PILES TO THE SITE EXCLUDING UNLOADING AND STACKING						
	DATA FOR	8.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LOW BED TRAILER 30 TON (TWO WAY)	2.00	KM	B0-130A	119.94		
	PRIME MOVER FOR 30 TON TRILER(TWO WAY)	2.00	KM	B0-131B	561.36		
	TOTAL COST PER 8 NOS. FOR 1.0 KM TRANSPORT				681.30		
	TOTAL COST PER 1 NO. PER 1 KM			ST1-132	85.16		
				SAY	85.15	0.00	85.15
ST1-133	STACKING OF 355 X355X9144 MM R.C.C. PILES						
	DATA FOR	8.00	NOS				
	LABOUR U/SK	4.00	DAY	B0-004	6,109.36		
	ALLOW 2.5% FOR TOOLS				152.73		
	MOBILE CRANE 25 TON	4.00	HOUR	B0-146	34,313.16		
	TOTAL COST PER 8 NOS.				40,575.25		
	TOTAL COST OF STACKING PER 1 NO.			ST1-133	5,071.91		
				SAY	5,071.90	763.67	4,308.23
ST1-134	TRANSPORT OF 305 X200X6100 MM R.C.SHEET PILES TO THE SITE EXCLUDING UNLOADING AND STACKING						
	DATA FOR	9.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LORRY 10 TON (TWO WAY)	2.00	KM	B0-148	203.24		
	TOTAL COST PER 54.9 LM. FOR 2 KM TRANSPORT				203.24		
	TOTAL COST PER 1 NO. PER 1 KM			ST1-134	22.58		
				SAY	22.60	0.00	22.60
ST1-135	STACKING OF 305 X200X6100 MM R.C.SHEET PILES						
	DATA FOR	9.00	NOS				
	LABOUR U/SK	3.00	DAY	B0-004	4,582.02		
	ALLOW 2.5% FOR TOOLS				114.55		
	MOBILE CRANE 25 TON	2.00	HOUR	B0-146	17,156.58		
	TOTAL COST PER 73.2 LM.				21,853.15		
	TOTAL COST OF STACKING PER 1 NO.			ST1-135	2,428.13		
				SAY	2,428.15	509.11	1,919.04

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE -----	DESCRIPTION OF ITEM -----	QUANTITY -----	UNIT ----	PRICE CODE -----	AMOUNT (Rs.) -----	LABOUR INPUT -----	OTHER INPUTS -----
ST1-136	DRIVING 305 X200X6100 MM R.C.SHEET PILES USING HAND MONKEY						
	DATA FOR	106.00	LM				
	INTERNAL TRANSPORTING PILES						
	LABOUR U/SK	40.00	DAY	B0-004	61,093.60		
	HANDLING PILES						
	LABOUR SK'A'	20.00	DAY	B0-001	38,000.00		
	LABOUR U/SK	100.00	DAY	B0-004	152,734.00		
	DRIVING PILES USING HAND MONKEY						
	LABOUR U/SK	320.00	DAY	B0-004	488,748.80		
	ALLOW 2.5% FOR TOOLS				18,514.41		
	TOTAL COST PER 106 LM.				759,090.81		
	TOTAL COST PER 1 M.			ST1-136	7,161.23		
					=====		
				SAY	7,161.25	6,986.57	174.68
ST1-137	SATURATED SAND FILLING						
	DATA FOR	8.50	M ³				
	LABOUR U/SK	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% FOR TOOLS				38.18		
	RIVER SAND FOR CONCRETE AND MASONRY WORK	8.93	CU.M	B0-332	35,720.00		
	TOTAL COST				37,285.52		
	RATE PER 1 M ³			ST1-137	4,386.53		
					=====		
				SAY	4,386.55	179.69	4,206.86
ST1-138	STACKING OF P.S.C.BEAM 16.15M (53' 0") LONG						
	DATA FOR	4.00	NOS				
	UNLOADING AND STACKING						
	LABOUR U/SK	4.00	DAY	B0-004	6,109.36		
	ALLOW 2.5% FOR TOOLS				152.73		
	MOBILE CRANE 25 TON	4.00	HOUR	B0-146	34,313.16		
	TOTAL COST				40,575.25		
	RATE PER 1 NO.			ST1-138	10,143.81		
					=====		
				SAY	10,143.80	1,527.34	8,616.46
ST1-139	TRANSPORT OF P.S.C.BEAM 16.15M (53' 0") LONG TO THE SITE						
	DATA FOR	4.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LOW BED TRAILER 30 TON (TWO WAY)	2.00	KM	B0-130A	119.94		
	PRIME MOVER FOR 30 TON TRILER (TWO WAY)	2.00	KM	B0-131B	561.36		
	TOTAL COST PER 73.2 LM.FOR 1.0 KM TRANSPORT				681.30		
	TOTAL COST PER 1 No. PER 1 KM			ST1-139	170.33		
					=====		
				SAY	170.30	0.00	170.30

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE -----	DESCRIPTION OF ITEM -----	QUANTITY -----	UNIT ----	PRICE CODE -----	AMOUNT (Rs.) -----	LABOUR INPUT -----	OTHER INPUTS -----
ST1-140	STACKING OF P.S.C.BEAM 13.41M (44' 0") OR 12.19M (40' 0") LONG						
	DATA FOR	6.00	NOS				
	UNLOADING AND STACKING						
	LABOUR U/SK	6.00	DAY	B0-004	9,164.04		
	ALLOW 2.5% FOR TOOLS				229.10		
	MOBILE CRANE 25 TON	4.00	HOUR	B0-146	34,313.16		
	TOTAL COST				43,706.30		
	RATE PER 1 NO.			ST1-140	7,284.38		
					=====		
				SAY	7,284.40	1,527.34	5,757.06
ST1-141	TRANSPORT OF P.S.C.BEAM 13.41M (44' 0") OR 12.19M (40' 0") LONG TO THE SITE						
	DATA FOR	6.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LOW BED TRAILER 30 TON (TWO WAY)	2.00	KM	B0-130A	119.94		
	PRIME MOVER FOR 30 TON TRILER (TWO WAY)	2.00	KM	B0-131B	561.36		
	TOTAL COST PER 73.2 LM.FOR 1.0 KM TRANSPORT				681.30		
	TOTAL COST PER 1 No. PER 1 KM			ST1-141	113.55		
					=====		
				SAY	113.55	0.00	113.55
ST1-142	STACKING OF P.S.C.BEAM 10.63M (35' 0") , 9.75M (32' 0") OR 8.23M (27' 0") LONG						
	DATA FOR	8.00	NOS				
	UNLOADING AND STACKING						
	LABOUR U/SK	6.00	DAY	B0-004	9,164.04		
	ALLOW 2.5% FOR TOOLS				229.10		
	MOBILE CRANE 25 TON	4.00	HOUR	B0-146	34,313.16		
	TOTAL COST				43,706.30		
	RATE PER 1 NO.			ST1-142	5,463.29		
					=====		
				SAY	5,463.30	1,145.51	4,317.80
ST1-143	TRANSPORT OF P.S.C.BEAM 10.63M (35' 0") , 9.75M (32' 0") OR 8.23M (27' 0") LONG TO THE SITE						
	DATA FOR	8.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LOW BED TRAILER 30 TON (TWO WAY)	2.00	KM	B0-130A	119.94		
	PRIME MOVER FOR 30 TON TRILER (TWO WAY)	2.00	KM	B0-131B	561.36		
	TOTAL COST PER 73.2 LM.FOR 1.0 KM TRANSPORT				681.30		
	TOTAL COST PER 1 No. PER 1 KM			ST1-143	85.16		
					=====		
				SAY	85.15	0.00	85.15

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
ST1-144	STACKING OF P.S.C.BEAM 7.01M (23' 0") LONG						
	DATA FOR	12.00	NOS				
	UNLOADING AND STACKING						
	LABOUR U/SK	6.00	DAY	B0-004	9,164.04		
	ALLOW 2.5% FOR TOOLS				229.10		
	MOBILE CRANE 25 TON	4.00	HOUR	B0-146	34,313.16		
	TOTAL COST				43,706.30		
	RATE PER 1 NO.			ST1-144	3,642.19		
				SAY	3,642.20	763.67	2,878.53
ST1-145	TRANSPORT OF P.S.C.BEAM 7.01M (23' 0") LONG TO THE SITE						
	DATA FOR	12.00	NOS				
	TRANSPORT DISTANCE	1.00	KM				
	LOW BED TRAILER 30 TON (TWO WAY)	2.00	KM	B0-130A	119.94		
	PRIME MOVER FOR 30 TON TRILER (TWO WAY)	2.00	KM	B0-131B	561.36		
	TOTAL COST PER 73.2 LM.FOR 1.0 KM TRANSPORT				681.30		
	TOTAL COST PER 1 No. PER 1 KM			ST1-145	56.78		
				SAY	56.80	0.00	56.80
ST1-146	50mm THICK COVER SLABS FOR SERVICE DUCTS IN GRADE 25(20) CONCRETE INCLUSIVE OF LIGHT REINFORCEMENT						
	DATA FOR	20.25	M ²				
	FOR UNLOADING AND STACKING						
	LABOUR U/SK	0.50	DAY	B0-004	763.67		
	FOR LAYING						
	LABOUR U/SK	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% FOR TOOLS				57.28		
	PAVING SLABS 450 X450X50 MM G.20 CONCRETE	100.00	NO	B0-449	49,500.00		
	TOTAL COST				51,848.29		
	RATE PER M ²			ST1-146	2,560.41		
				SAY	2,560.40	113.14	2,447.26
ST1-147	110mm Ø TYPE 400 P.V.C. SERVICE DUCT SUPPLYING AND FIXING IN DECK						
	DATA FOR	20.00	L.M				
	LABOUR SK'A'	1.00	DAY	B0-001	1,900.00		
	LABOUR U/SK	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% FOR TOOLS				85.68		
	P.V.C PIPE 110mm TYPE 400 WITH TRANSPORT	20.00	M	B0-636B	12,474.00		
	TOTAL COST				15,987.02		
	RATE PER 1 L.M.			ST1-147	799.35		
				SAY	799.35	171.37	627.98

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE -----	DESCRIPTION OF ITEM -----	QUANTITY -----	UNIT ----	PRICE CODE -----	AMOUNT (Rs.) -----	LABOUR INPUT -----	OTHER INPUTS -----
ST1-148	110mm Ø TYPE 250 P.V.C. RAIN WATER OUTLETS SUPPLIED AND FIXED THROUGH DECK						
	DATA FOR	10.00	L.M				
	FOR HANDLING AND CUTTING						
	LABOUR U/SK	0.50	DAY	B0-004	763.67		
	FOR SHAPING AND FIXING						
	LABOUR SK'A'	0.50	DAY	B0-001	950.00		
	LABOUR U/SK	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% FOR TOOLS				81.03		
	P.V.C PIPE 110mm TYPE 250 WITH TRANSPORT	10.50	M	B0-636	3,891.83		
	TOTAL COST				7,213.86		
	RATE PER 1 L.M.			ST1-148	721.39		
					=====		
				SAY	721.40	324.10	397.30
ST1-149	50mm Ø TYPE 400 P.V.C. DRAIN PIPES SUPPLIED AND FIXED THROUGH DECK						
	DATA FOR	15.00	L.M				
	FOR HANDLING AND CUTTING						
	LABOUR U/SK	0.50	DAY	B0-004	763.67		
	FOR SHAPING AND FIXING						
	LABOUR SK'A'	0.50	DAY	B0-001	950.00		
	LABOUR U/SK	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% FOR TOOLS				81.03		
	P.V.C PIPE 50mm TYPE 400 WITH TRANSPORT	16.00	M	B0-637	3,133.60		
	TOTAL COST				6,455.64		
	RATE PER 1 L.M.			ST1-149	430.38		
					=====		
				SAY	430.40	216.07	214.33
ST1-150	25mm Ø TYPE 1000 P.V.C. DRAIN PIPES SUPPLIED AND FIXED THROUGH DECK						
	DATA FOR	20.00	L.M				
	FOR HANDLING AND CUTTING						
	LABOUR U/SK	0.50	DAY	B0-004	763.67		
	FOR SHAPING AND FIXING						
	LABOUR SK'A'	0.50	DAY	B0-001	950.00		
	LABOUR U/SK	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% FOR TOOLS				81.03		
	P.V.C PIPE 25mm TYPE 1000 WITH TRANSPORT	21.50	M	B0-637A	2,649.88		
	TOTAL COST				5,971.91		
	RATE PER 1 L.M.			ST1-150	298.60		
					=====		
				SAY	298.60	162.05	136.55

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
	SECTION XI =====						
	KILOMETER POSTS AND GUARD STONES -----						
RF1-001	WHITE WASHING, TWO COATS TO GUIDE/GUARD STONES:						
	DATA FOR 100 NOS.						
	LABOUR (S/SK)	1.75	DAYS	B0-003	2,800.00		
	LABOUR (U/SK)	1.75	DAYS	B0-004	2,672.85		
	ALLOW 2.5% ON LABOUR FOR TOOLS				136.82		
	LIME BOILED	31.25	KG	B0-537	748.44		
	GLUE	0.11	KG	B0-534	36.90		

					6,395.00		

	COST FOR 100 NOS.				6,395.00		
	RATE PER 1 NO.			RF1-001	63.95		
					=====		
				SAY	63.95	54.73	9.22
RF1-002	WHITEWASHING TWO COATS K.M. STONES INC. NUMBERING & TAR SKIRTING:						
	DATA FOR 20 NOS.						
	LABOUR (S/SK) WHITEWASHING	1.75	DAYS	B0-003	2,800.00		
	LABOUR (U/SK)	1.75	DAYS	B0-004	2,672.85		
	PAINTER (S/SK) NUMBERING	2.25	DAYS	B0-003	3,600.00		
	LABOUR (U/SK)	2.25	DAYS	B0-004	3,436.52		
	ALLOW 2.5% ON LABOUR FOR TOOLS				312.73		
	LIME BOILED	12.50	KG	B0-537	299.38		
	GLUE	0.09	KG	B0-534	28.27		
	PAINT	0.09	LTR	B0-541	68.66		
	COAL TAR	1.14	LTR	B0-531	113.65		

					13,332.05		

	COST FOR 20 NOS.				13,332.05		
	RATE PER 1 NO.			RF1-002	666.60		
					=====		
				SAY	666.60	625.47	41.13
RF1-003	PAINTING WHITE BACK GROUND ON PARAPETS ETC. & STENCILLING NOS.:						
	DATA FOR 50 NOS.						
	PAINTER (S/SK)	3.50	DAYS	B0-003	5,600.00		
	LABOUR (U/SK)	3.50	DAYS	B0-004	5,345.69		
	ALLOW 2.5% ON LABOUR FOR TOOLS				273.64		
	PAINT	1.50	LTR	B0-541	1,132.80		

					12,352.13		

	COST FOR 50 NOS.				12,352.13		
	RATE PER 1 NO.			RF1-003	247.04		
					=====		
				SAY	247.05	218.91	28.14

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RF1-004	FIXING GUARD STONES IN ANY SOIL: DATA FOR 16 NOS. LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	2.00	DAYS	B0-004	3,054.68 76.37 3,131.05		
	COST FOR 16 NOS.				3,131.05		
	RATE PER 1 NO.			RF1-004	195.69		
				SAY	195.70	190.92	4.78
RF1-005	CASTING STD. K.M. STONES WITH R.C.C [1:2:4(19 MM) & CEMENT 282.5 KG/CU.M], INCLUDING CURING, FOR "A" AND "B" CLASS ROADS :						
	DATA FOR 10 NOS. CONCRETE AS PER ST1-046	1.27	CU.M	ST1-046	19,446.24		
	STEEL FAB. AS PER ST1-054	41.66	KG	ST1-054	10,237.61		
	LABOUR (S/SK) ADDL.LAB. FOR PLACING	1.00	DAY	B0-003	1,600.00		
	MASON (SK'A) ASSEMBLING MOULD ETC.	2.50	DAYS	B0-001	4,750.00		
	LABOUR (U/SK) ASSEMBLING MOULD ETC.	2.50	DAYS	B0-004	3,818.35		
	LABOUR (U/SK) CURING	9.00	DAYS	B0-004	13,746.06		
	ALLOW 2.5% ON LABOUR FOR TOOLS				597.86		
	GUNNY BAGS	10.00	NO.	B0-632	551.00		
	MOULD OIL	1.50	LTR	B0-602	64.51		
					54,811.63		
	COST FOR 10 NOS.				54,811.63		
	RATE PER 1 NO.			RF1-005	5,481.16		
				SAY	5,481.15	3,248.25	2,232.90
RF1-006	CASTING STD. K.M. STONES WITH R.C.C [1:2:4(19 MM) & CEMENT 282.5 KG/CU.M], INCLUDING CURING, FOR "C" AND "D" CLASS ROADS :						
	DATA FOR 10 NOS. CONCRETE AS PER R1-636M	0.62	CU.M	ST1-046	9,507.05		
	STEEL FAB. AS PER R1-643M	37.59	KG	ST1-054	9,238.82		
	LABOUR (S/SK) ADDL.LAB. FOR PLACING	0.50	DAY	B0-003	800.00		
	MASON (SK'A) ASSEMBLING MOULD ETC.	1.50	DAYS	B0-001	2,850.00		
	LABOUR (U/SK) ASSEMBLING MOULD ETC.	1.50	DAYS	B0-004	2,291.01		
	LABOUR (U/SK) CURING	7.00	DAYS	B0-004	10,691.38		
	ALLOW 2.5% ON LABOUR FOR TOOLS				415.81		
	GUNNY BAGS	10.00	NO	B0-632	551.00		
	MOULD OIL	1.50	LTR	B0-602	64.51		
					36,409.58		
	COST FOR 10 NOS.				36,409.58		
	RATE PER 1 NO.			RF1-006	3,640.96		
				SAY	3,640.95	2,202.72	1,438.23

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RF1-007	FIXING STANDARD TYPE K.M. STONES IN ANY SOIL: DATA FOR 8 NOS. EXCAVATION AS PER E1-014 LABOUR (S/SK) LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	1.42 1.00 5.00	CU.M DAY DAYS	E1-014 B0-003 B0-004	2,130.71 1,600.00 7,636.70 230.92		
					11,598.32		
	COST FOR 8 NOS.				11,598.32		
	RATE PER 1 NO.			RF1-007	1,449.79		
				SAY	1,449.80	1,409.14	40.66
RF1-008	FIXING NEW OR REFIXING TYPE GUARD STONES IN CEMENT CONCRETE [1:3:6(37.5 MM) AND CEMENT 219 KG/CU.M] WITH MIN. COVER 75MM X 300MM DEPTH: LABOUR (U/SK) (1 HOUR) ALLOW 2.55 ON LABOUR FOR TOOLS CONCRETE AS PER ST1-040	0.13 0.04	DAY CU.M	B0-004 ST1-040	190.92 4.77 548.41		
					744.10		
	RATE PER NO.			RF1-008	744.10		
				SAY	744.10	370.55	373.55
RF1-009	CASTING STANDARD TYPE GUARD STONES IN CONCRETE [1:2:4(19 MM) & CEMENT 282.5 KG/CU.M] : DATA FOR 30 NOS. CONCRETE AS PER ST1-046 CARPENTER (SK/A) LABOUR (U/SK) MASON (SK/A) LABOUR (U/SK) LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS TIMBER 25 MM PLANKS (CLASS 2) GUNNY BAGS MOULD OIL	1.70 2.00 2.00 1.50 1.50 9.00 51.82 15.00 1.50	CU.M DAYS DAYS DAYS DAYS DAYS CU.DECI M NO. LTR	ST1-046 B0-001 B0-004 B0-001 B0-004 B0-004 B0-392 B0-632 B0-602	25,928.32 3,800.00 3,054.68 2,850.00 2,291.01 13,746.06 643.54 5,244.20 826.50 64.51		
					58,448.82		
	COST FOR 30 NOS.				58,448.82		
	RATE PER 1 NO.			RF1-009	1,948.29		
				SAY	1,948.30	1,109.26	839.04

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RF1-009A	CASTING STANDARD TYPE GUARD STONES IN CONCRETE G25(19) AS PER DRAWING NO. T/B/100-REV 1, FOR BRIDGES & CULVERTS :						
	DATA FOR 30 NOS.						
	1. TIMBER FORMWORK FOR MOULD - NUMBER OF USES	20.00					
	CARPENTER (SK'A')	2.00	DAYS	B0-001	3,800.00		
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				171.37		
	PLY WOOD (WBP) 15 MM THICK	29.68	SQ.M	B0-396	29,031.49		
	50MM X 50 MM SAWN TIMBER	867.51	CU.DECI M	B0-392	87,792.01		
	WIRE NAILS	1.50	KG	B0-432	293.93		
	75 MM. X 8 MM DIA. NUTS AND BOLTS	720.00	NOS.	B0-647	6,948.00		
	COST FOR 30 MOULDS FOR 20 USES				131,091.48		
	COST FOR 30 MOULDS FOR 01 USE				6,554.57		
	2. ROUND BARS FOR MAKING 20 MM DIA HOLES AS PER DRWG. FOR		200 USES				
	LABOUR (U/SK) FOR CUTTING	3.00	DAYS	B0-004	4,582.02		
	ALLOW 2.5% ON LABOUR FOR TOOLS				114.55		
	M.S. ROUNDS 20 MM DIA.	58.90	KG	B0-411	8,442.33		
	COST FOR 30 MOULDS FOR 20 USES				13,138.90		
	COST FOR 30 MOULDS FOR 01 USE				65.69		
	3. CLEANING MOULD, FIXING CONCRETING AND CURING FOR 7 DAYS						
	MASON SK'A'	1.50	DAYS	B0-001	2,850.00		
	LABOUR U/SK	10.50	DAYS	B0-004	16,037.07		
	ALLOW 2.5% ON LABOUR FOR TOOLS				472.18		
	CONCRETE GRADE 25(20)	1.72	CU.M	ST1-048	27,948.94		
	M.S. ROUNDS FOR REINFORCEMENT	101.42	KG	ST1-054	24,923.97		
	MOULD OIL	1.50	LTR	B0-602	64.50		
	GUNNEY BAGS (JUTE)	15.00	NO.	B0-632	826.50		
	ALLOW FOR WATER	210.00	LTR	B0-788	262.50		
	ALLOW FOR CASTING BED(10% OF BASE AREA)	0.09	SQ.M.	ST1-057	118.81		
	COST FOR 30 NO. GUARD STONES				73,504.46		
	TOTAL COST PER 30 GUARD STONES (1+2+3)				80,124.73		
	COST PER GUARD STONE FOR BRIDGES & CULVERTS			RF1-009A	2,670.82		
				SAY	2,670.80	1,059.83	1,610.97
RF1-010	ROUTE NUMBERING WITH REFLECTIVE PAINT ON 2 SIDES:(REFLECTIVE PAINT TO BE PAID SEPARATELY)						
	DATA FOR 5 NOS.						
	SIGNBOARD PAINTER (SK/A)	1.25	DAYS	B0-001	2,375.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				59.38		
	ALLOW FOR OTHER PAINT	1.00	ITEM	B0-741	123.55		
	COST FOR 5 NOS.				2,557.93		
	RATE PER 1 NO.			RF1-010	511.59		
				SAY	511.60	475.00	36.60

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RF1-011	CASTING STANDARD BOUNDARY MARKERS IN REINFORCED CONCRETE [1:2:4(19 MM)] WITH ADMIXTURES, INCLUDING 14 DAYS CURING AND LOADING TO VEHICLES AT YARD (AGGREGATE TRANSPORT TO PAY SEPARATELY) :						
	DATA FOR 14 NO.						
(A)	STEEL FORM WORK (FOR 1000 USES) COST FOR 14 NOS. ADD FOR REPAIRS 25%	2,600.00 36.40 9.10					
	TOTAL COST ON FORM WORK				45.50		
(B)	MATERIALS: CEMENT SAND AGGREGATE 19MM LESS PILING WATER MILD STEEL 6 MM & 10MM RE/BARS BINDING WIRE MOULD OIL ADMIX.(POZZOLITH: 0.3 LTR/BAG CEMENT)	3.25 0.35 0.55 0.55 41.50 0.40 3.00 0.98	BAGS CU.M CU.M ITEM KG KG LTRS LTRS	B0-401 B0-332 B0-308A B0-781 B0-411 B0-431 B0-602 B0-645	3,302.00 1,400.00 1,515.31 16.37 5,948.33 94.52 129.00 133.18		
	TOTAL COST ON MATERIALS				12,538.70		
(C)	PLANT: CONCRETE MIXER (400 LITRES) PORKER VIBRATOR	0.13 0.50	DAY DAY	B0-102 B0-106	919.54 1,159.36		
	TOTAL COST ON PLANT				2,078.90		
(D)	LABOUR: CONCRETE MIXING : S/SK 8 NOS. GANG CONCRETING : MASON SK 'A' HELPER U/SK STEEL WORK : BAR BENDER SK'A' HELPER U/SK HANDLING OF MARKERS AT YARD FOR STACKING, & LOADING ETC. : U/SK 4 NOS. GANG ADD 2.5% OF LABOUR FOR TOOLS	0.13 1.00 1.00 1.00 1.00 0.50	DAY DAY DAY DAY DAY DAY	B0-003 B0-001 B0-004 B0-001 B0-004 B0-004	1,600.00 1,900.00 1,527.34 1,900.00 1,527.34 3,054.68 287.73		
	TOTAL COST ON LABOUR				11,797.09		
(E)	CURING: CURING AREA FOR 14 NOS. MARKERS COST OF CURING TANK & WATER ASSUME COST OF CURING FOR 14 DAYS	12.19 5.00 8.53	SQ.M % OF CURING AREA SQ.M-D)	ST1-053	248.65		
	TOTAL BASIC COST FOR 14 MARKERS (A+B+C+D+E)				26,708.84		
	COST FOR 14 NO. BOUNDARY MARKERS				26,708.84		
	COST FOR 1 NO. MARKER			RF1-011	1,907.77		
				SAY	1,907.75	826.85	1,080.90
*NOTE:	19 MM AGGREGATE PER BOUNDARY MARKER :	0.04	CU.M				

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION XII							
NOTICE BOARDS & SIGN BOARDS							
[SSCM 810.2 AND 1501.3] (ALL PAINTS SHOULD CONFORM TO THE REQUIREMENTS OF S.L.S. AS GIVEN IN SSCM 1707)							
RS1-001	NOTICE & TRAFFIC SIGN BOARDS ETC. FIXED IN CONCRETE [1:3:6(37.5 MM) AND CEMENT 219 KG/CU.M], (EXCLUDING TRANSPORT OF AGGREGATE):						
	DATA FOR 5 NOS.						
	EXCAVATION AS PER E1-014	0.28	CU.M	E1-014	426.40		
	CONCRETE AS PER ST1-040	0.28	CU.M	ST1-040	3,834.38		
	MASON (SK/A)	0.50	DAY	B0-001	950.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				61.93		
					6,800.05		
	RATE PER 5 NOS.				6,800.05		
	RATE PER 1 NO.			RS1-001	1,360.01		
				SAY	1,360.00	828.17	531.83
RS1-002	CLEANING & WHITEWASHING 2 COAT TOWN NAME BOARDS (INC. TAR SKIRT)						
	DATA FOR 20 NOS.						
	PAINTER (S/SK)	1.75	DAYS	B0-003	2,800.00		
	LABOUR (U/SK)	1.75	DAYS	B0-004	2,672.85		
	ALLOW 2.5% ON LABOUR FOR TOOLS				136.82		
	LIME BOILED	62.50	KG	B0-537	1,496.88		
	GLUE	0.23	KG	B0-534	74.39		
	COAL TAR	0.27	LTR	B0-531	27.28		
					7,208.21		
	RATE PER 20 NOS.				7,208.21		
	RATE PER 1 NO.			RS1-002	360.41		
				SAY	360.40	273.64	86.76
RS1-003	CLEANING, PAINTING ONE COAT & RELETTERING ETC. TRFFIC SIGN BOARDS INC. PAINT POST IN B/W						
	DATA FOR 5 NOS.						
	SIGNBOARD PAINTER (SK/A)	2.50	DAYS	B0-001	4,750.00		
	LABOUR (U/SK)	2.50	DAYS	B0-004	3,818.35		
	ALLOW 2.5% ON LABOUR FOR TOOLS				214.21		
	ENAMEL PAINT	0.77	LTR	B0-541	583.65		
					9,366.21		
	RATE PER 5 NOS.				9,366.21		
	RATE PER 1 NO.			RS1-003	1,873.24		
				SAY	1,873.25	1,713.67	159.58

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RS1-004	CLEANING AND PAINTING 1 COAT ON NOTICE BOARD						
	DATA FOR 9.29 SQ.M						
	Painter (S/SK)	1.25	DAYS	B0-003	2,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				50.00		
	ENAMEL PAINT	0.77	LTR	B0-541	583.65		
					2,633.65		
	RATE PER 9.29 SQ.M				2,633.65		
	RATE PER 1 NO.			RS1-004	283.49		
				SAY	283.50	215.29	68.21
RS1-005	LETTERING & NUMBERING BELOW 50 MM						
	DATA FOR 48 NOS.						
	SIGNBOARD PAINTER (SK/A)	1.00	DAY	B0-001	1,900.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				47.50		
	PAINT	1.00	ITEM	B0-741	123.55		
					2,071.05		
	RATE PER 48 NOS				2,071.05		
	RATE PER 1 NO.			RS1-005	43.15		
				SAY	43.15	39.58	3.57
RS1-006	LETTERING & NUMBERING 50 MM - 75 MM						
	DATA FOR 40 NOS.						
	SIGNBOARD PAINTER (SK/A)	1.00	DAY	B0-001	1,900.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				47.50		
	PAINT	1.00	ITEM	B0-741	123.55		
					2,071.05		
	RATE PER 40 NOS				2,071.05		
	RATE PER 1 NO.			RS1-006	51.78		
				SAY	51.80	47.50	4.30
RS1-007	LETTERING & NUMBERING 75 MM - 150 MM						
	DATA FOR 32 NOS.						
	SIGNBOARD PAINTER (SK/A)	1.00	DAY	B0-001	1,900.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				47.50		
	PAINT	1.00	ITEM	B0-741	123.55		
					2,071.05		
	RATE PER 32 NOS				2,071.05		
	RATE PER 1 NO.			RS1-007	64.72		
				SAY	64.70	59.38	5.33

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RS1-008	LETTERING & NUMBERING 150 MM - 225 MM						
	DATA FOR 24 NOS.						
	SIGNBOARD PAINTER (SK/A)	1.00	DAY	B0-001	1,900.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				47.50		
	PAINT	1.00	ITEM	B0-741	123.55		
					2,071.05		
	RATE PER 24 NOS				2,071.05		
	RATE PER 1 NO.			RS1-008	86.29		
				SAY	86.30	79.17	7.13
RS1-009	PAINTING 2 COATS CONTINUOUS CENTRE LINE, 100 MM WIDE WITH ENAMEL PAINT :						
	DATA FOR 90 L.METRES (9.0 SQ.M)						
	PAINTER (SK/A)	2.25	DAYS	B0-001	4,275.00		
	LABOUR (U/SK)	2.25	DAYS	B0-004	3,436.52		
	ALLOW 2.5% ON LABOUR FOR TOOLS				192.79		
	PAINT(ENAMEL)	1.50	LTR	B0-541	1,132.96		
	ALLOW FOR BARRICADING	0.90	ITEM	B0-705	1,767.29		
					10,804.55		
	RATE PER 90 M				10,804.55		
	RATE PER 1 METRE			RS1-009	120.05		
				SAY	120.05	85.68	34.37
RS1-010	PAINTING 1 COAT CONTINUES CENTRE LINE, 100 MM WIDE WITH ROAD MARKING PAINT(WHITE) :						
	DATA FOR 90 L.METRES (9.0 SQ.M)						
	PAINTER (SK/A)	2.38	DAYS	B0-001	4,512.50		
	LABOUR (U/SK)	2.38	DAYS	B0-004	3,627.43		
	ALLOW 2.5% ON LABOUR FOR TOOLS				203.50		
	ROAD MARKING PAINT @ RATE OF 6.5 SQ. M PER LITRE	1.38	LTR	B0-548	1,260.82		
	ALLOW FOR BARRICADING	0.90	ITEM	B0-705	1,767.29		
					11,371.53		
	RATE PER 90 M				11,371.53		
	RATE PER 1 METRE			RS1-010	126.35		
				SAY	126.35	90.44	35.91

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RS1-011	PAINING 2 COATS BROKEN CENTRE LINE, 100 MM WIDE WITH ENAMEL PAINT :						
	DATA FOR 90 L.METRES (4.5 SQ.M)						
	Painter (SK/A)	2.25	DAYS	B0-001	4,275.00		
	LABOUR (U/SK)	2.25	DAYS	B0-004	3,436.52		
	ALLOW 2.5% ON LABOUR FOR TOOLS				192.79		
	PAINT/(ENAMEL)	0.77	LTR	B0-541	583.65		
	ALLOW FOR BARRICADING	0.90	ITEM	B0-705	1,767.29		
					10,255.23		
	RATE PER 90 M				10,255.23		
	RATE PER 1 METRE			RS1-011	113.95		
				SAY	113.95	85.68	28.27
RS1-012	PAINING 1 COAT BROKEN CENTRE LINE, WITHOUT REFLECTIVE STUDS), 100 MM WIDE, AT 3 METRE INTERVALS WITH ROAD MARKING PAINT(WHITE) :						
	DATA FOR 90 L.METRES (4.5 SQ.M)						
	Painter (SK/A)	2.38	DAYS	B0-001	4,512.50		
	LABOUR (U/SK)	2.38	DAYS	B0-004	3,627.43		
	ALLOW 2.5% ON LABOUR FOR TOOLS				203.50		
	ROAD MARKING PAINT @ RATE OF 6.5 SQ.M PER LITRE	0.69	LTR	B0-548	630.41		
	ALLOW FOR BARRICADING	0.90	ITEM	B0-705	1,767.29		
					10,741.12		
	RATE PER 90 M				10,741.12		
	RATE PER 1 METRE			RS1-012	119.35		
				SAY	119.35	90.44	28.91
RS1-013	BARRICADING WITH EMPTY (HOT TAR) BARRELS INCLUDING WHITE WASHING, TRANSPORTING AND COST OF BARRELS :						
	DATA FOR 16 NOS.BARRELS (FOR 35 USES)						
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS				57.28		
	ALLOW FOR WHITE WASHING BARRELS	16.00	NOS.	B0-791	816.80		
	ALLOW COST OF BARRELS (35 USES)	0.46	NOS.	B0-635	41.39		
	TRANSPORT OF BARRELS - AS PER T1-010	16.00	NOS	T1-010	641.60		
					3,848.08		
	RATE PER 16 NOS.				3,848.08		
	RATE PER 1 NO.			RS1-013	240.50		
				SAY	240.50	147.10	93.40

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
RS1-014	REVTMENT TO BANKS ETC. WITH EMPTY BARRELS IN HORIZONTAL TIERS WITH VERTICAL BATTER(1:8), INCLUDING TRANSPORT OF BARRELS :						
	DATA FOR 16 NOS.						
	MASON (SK/A)	0.50	DAY	B0-001	950.00		
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				176.48		
	EMPTY TAR BARRELS (140 LTRS.)	16.00	NOS.	B0-635	1,448.80		
	TRANSPORT OF BARRELS AS PER T1-010	16.00	NOS.	T1-010	641.60		
					9,326.24		
	RATE PER 16 NOS.				9,326.24		
	RATE PER 1 NO.			RS1-014	582.89		
				SAY	582.90	445.12	137.78
RS1-015	ROAD MARKING CONTINUOUS CENTRE LINE 100 MM WIDTH, USING THERMOPLASTIC PAINT(WHITE), INCLUSIVE BARRICADING. (PAINT MATERIAL AND REFLECTIVE GLASS BEADS TO PAY SEPARATELY)						
	DATA FOR 1.0 KILOMETRES						
	LABOUR SK'A'	3.00	NO.	B0-001	5,700.00		
	LABOUR U/SK	4.00	NO.	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				295.23		
	ROAD MARKER (GAS HEATED)	8.00	HOURS	B0-139	13,600.00		
	ALLOWE FOR BARRICADING	0.90	DAY	B0-705	1,767.29		
	COST PER 1 KM				27,471.88		
	TOTAL COST PER 100 SQ.M(1 KM)				27,471.88		
	RATE PER 1 SQ.M			RS1-015	274.72		
				SAY	274.70	118.09	156.61
	NOTE * 1 KG OF THERMOPLASTIC PAINT COVERS 0.14 SQ.M AREA AT 3.0 MM THICKNESS 25 KG OF GLASS BEADS IS SUFFICIENT FOR 100 SQ.M OF CENTER LINE.						
RS1-016	ROAD MARKING, STANDARD PEDESTRIAN CROSSING, USING THERMOPLASTIC PAINT (YELLOW) (PAINT MATERIAL AND REFLECTIVE GLASS BEADS TO PAY SEPARATELY)						
	DATA FOR AVERAGE 15 METRE WIDE ROAD (34.0 SQ.M)						
	LABOUR SK'A'	0.67	NO.	B0-001	1,273.00		
	LABOUR U/SK	1.00	NO.	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				70.01		
	ROAD MARKER (GAS HEATED)	2.64	HOURS	B0-139	4,488.00		
	ALLOWE FOR BARRICADING	0.90	DAY	B0-705	1,767.29		
	COST PER 15 M				9,125.63		
	TOTAL COST PER 34.0SQ.M (15.M CARRIAGEWAY WIDTH)				9,125.63		
	RATE PER 1 SQ.M			RS1-016	268.40		
				SAY	268.40	186.69	81.71
	NOTE * 1 KG OF THERMOPLASTIC PAINT COVERS 0.14 SQ.M AREA AT 3.0 MM THICKNESS 25 KG OF GLASS BEADS IS SUFFICIENT FOR 100 SQ.M AREA.						

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HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
	SECTION XIII =====						
	MISCELLANEOUS =====						
MS1-001	PREPARING, STOCK PILING PREMIX USING PEN. GRADE 80/100 BITUMEN (EXCL. TRANSPORT OF AGGREGATE) (SITE MADE):						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - HEATING	1.00	DAY	B0-003	1,600.00		
	LABOUR (S/SK) - MIXING	6.00	DAYS	B0-003	9,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				280.00		
	BITUMEN(80/100)	191.00	LTR	B0-351	16,426.00		
	AGGREGATE 12.5 MM	1.81	CU.M	B0-309	5,249.00		
	SAND	1.22	CU.M	B0-331	4,867.60		
	KEROSINE	45.00	LTR	B0-601	4,950.00		
	TAR BOILER	0.50	DAY	B0-101	50.00		
	FIREWOOD	0.38	CU.M	B0-395	571.01		
	BASKET (2/3)	0.67	NO.	B0-631	173.33		
					43,766.94		
	COST PER 2.83 CU.M				43,766.94		
	RATE PER 1 CU.M			MS1-001	15,465.35		
				SAY	15,465.35	3,957.60	11,507.75
MS1-002	PATCHING SHALLOW POT HOLES, DEPTH LESS THAN 20 MM USING HOT BITUMEN (80/100)1.2 LTR/SQ.M AND 12.5 MM CHIPS SINGLE SIZE AT THE RATE OF 13.75 CU.DECI M/SQ.M INCLUDING HAND TAMPING (RATE INCLUDES COST OF BITUMEN AND MATERIALS) (EXCL. TRANSPORT OF AGGREGATE & BITUMEN):						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK) - CLEANING SURFACE	3.00	DAYS	B0-004	4,582.02		
	LABOUR (S/SK) - APPLYING BITUMEN	2.00	DAYS	B0-003	3,200.00		
	LABOUR (S/SK) - SPREADING	1.00	DAY	B0-003	1,600.00		
	LABOUR (S/SK) - STAMPING	6.00	DAYS	B0-003	9,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				474.55		
	BITUMEN	334.80	LTR	B0-351	28,792.80		
	TAR BOILER	0.50	DAY	B0-101	50.00		
	AGGREGATE 12.5 MM	3.84	CU.M	B0-309	11,136.00		
	FIREWOOD	0.38	CU.M	B0-395	574.46		
	HIRE OF TRACTOR & TRAILOR	1.00	DAY	B0-117	6,432.98		
	BASKETS	1.00	NO.	B0-631	260.00		
					66,702.81		
	COST PER 279 SQ.M				66,702.81		
	RATE PER 1 SQ.M			MS1-002	239.08		
				SAY	239.10	68.04	171.06

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-003	PATCHING SHALLOW POT HOLES, DEPTH LESS THAN 20 MM USING MC30 BITUMEN 1.2 LTR/SQ.M AND 12.5 MM CHIPS SINGLE SIZE AT THE RATE OF 13.75 CU.DECI M/SQ.M INCLUDING HAND TAMPING (RATE INCLUDES COST OF BITUMEN AND MATERIALS) (EXCL. TRANSPORT OF AGGREGATE AND BITUMEN):						
(A)	PREPARATION OF 10%-20% CUT BACK BITUMEN						
	DATA FOR 109 LTR						
	LABOUR U/SK	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOLS				19.09		
	BITUMEN	87.20	LTR	B0-351	7,499.20		
	KEROSINE	21.80	LTR	B0-601	2,398.00		
	TAR BOILER	0.25	DAY	B0-101	25.00		
	FIREWOOD (1/8)	0.10	CU.M	B0-395	143.62		
					10,848.58		
	COST PER 109 LITRES				10,848.58		
	RATE PER 1 LTR			MS1-003A	99.53		
(B)	DATA FOR 279 SQ.M						
	LABOUR (U/SK) - CLEANING SURFACE	3.00	DAYS	B0-004	4,582.02		
	LABOUR (S/SK) - APPLYING BITUMEN	2.00	DAYS	B0-003	3,200.00		
	LABOUR (S/SK) - SPREADING	1.00	DAY	B0-003	1,600.00		
	LABOUR (S/SK) - FOR STAMPING	6.00	DAYS	B0-003	9,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				474.55		
	CUTBACK BITUMEN AS PER MS1-003A	334.80	LTR	MS1-003A	33,322.05		
	AGGREGATE 12.5 MM	3.84	CU.M	B0-309	11,136.00		
	HIRE OF TRACTOR & TRAILOR	1.00	DAY	B0-117	6,432.98		
	BASKETS	1.00	NO.	B0-631	260.00		
					70,607.60		
	COST PER 279 SQ.M				70,607.60		
	RATE PER 1 SQ.M			MS1-003	253.07		
				SAY	253.05	76.44	176.61

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-004	PATCHING SHALLOW POT HOLES, DEPTH LESS THAN 20 MM USING EMULSION (CRS 1) AT THE RATE OF 1.2 LTR/SQ.M AND 12.5 MM CHIPS SINGLE SIZE AT THE RATE OF 13.75 CU.DECI M/SQ.M INCLUDING HAND TAMPING, TRANSPORT OF EMULSION TO SITE ETC. (RATE INCLUDES COST OF EMULSION AND OTHER MATERIALS) (EXCL. TRANSPORT OF AGGREGATE):						
	DATA FOR 279 SQ.M						
	LABOUR (U/SK) - CLEANING SURFACE	3.00	DAYS	B0-004	4,582.02		
	LABOUR (S/SK) - APPLYING EMULSION	2.00	DAYS	B0-003	3,200.00		
	LABOUR (S/SK) - SPREADING	1.00	DAY	B0-003	1,600.00		
	LABOUR (S/SK) - FOR STAMPING	6.00	DAYS	B0-003	9,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				474.55		
	EMULSION (CRS - 1)	334.80	LTR	B0-353	31,531.46		
	AGGREGATE 12.5 MM	3.84	CU.M	B0-309	11,136.00		
	HIRE OF TRACTOR & TRAILOR BASKETS	1.00	DAY	B0-117	6,432.98		
		1.00	NO.	B0-631	260.00		
					68,817.01		
	COST PER 279 SQ.M				68,817.01		
	RATE PER 1 SQ.M			MS1-004	246.66		
				SAY	246.65	68.04	178.61
MS1-005	PATCHING POT HOLES OF MEDIUM DEPTH OF 20-75 MM WITH PREMIX MATERIAL (SITE MADE) USING CUT BACK BITUMEN 10-20% AT THE RATE OF 83.5 LITRES PER CU. METRE OF 19 MM AND DOWN GAUGE STONE AGGREGATE, INCLUDING PREPARATION OF SURFACE, TACK COAT WITH EMULSION (CSS-1) AT .75 LTR/SQ.M, TRIMMING SIDES, LAYING PREMIX, TAMPING ETC. COMPLETE. (RATE INCLUSIVE OF PREMIX MADE AT SITE & TACK COAT) (EXCL. TRANSPORT OF AGGREGATE):						
(A)	PREPARATION OF POT HOLES						
	DATA FOR 9.29 SQ.M						
	LABOUR (U/SK) - SHAPING POT HOLES	0.80	DAY	B0-004	1,221.87		
	LABOUR (U/SK) - CLEANING POT HOLES	0.25	DAY	B0-004	381.84		
	ALLOW 2.5% ON LABOUR FOR TOOLS				40.09		
					1,643.80		
	COST PER 9.29 SQ.M				1,643.80		
	RATE PER 1 SQ.M			MS1-005A	176.94		
(B)	PATCHING POT HOLES INCLUDING TACK COAT						
	DATA FOR 9.29 SQ.M						
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				78.18		
	EMULSION (CSS - 1)	6.97	LTR	B0-352	650.42		
					3,855.94		
	COST PER 9.29 SQ.M				3,855.94		
	RATE PER 1 SQ.M			MS1-005B	415.06		

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
(C)	PREPARATION OF PREMIX WITH 10-20% CUT BACK BITUMEN(80/100). (EXCL. TRANSPORT OF AGGREGATE)						
	DATA FOR 2.83 CU.M						
	LABOUR (S/SK) HEATING AGGREGATE AND BITUMEN	1.00	DAY	B0-003	1,600.00		
	LABOUR (S/SK) - MIXING & PREPARING	6.00	DAYS	B0-003	9,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				280.00		
	10-20% CUT BACK BITUMEN	236.31	LTR	MS1-003A	23,519.02		
	AGGREGATE 12.5 MM	1.81	CU.M	B0-309	5,249.00		
	SAND	1.22	CU.M	B0-331	4,867.60		
	FIREWOOD	0.38	CU.M	B0-395	574.46		
	BASKET (2/3)	0.67	NO.	B0-631	173.33		
					45,863.42		
	COST PER 2.83 CU.M				45,863.42		
	RATE PER 1 CU.M			MS1-005C	16,206.15		
(D)	COST OF PREMIX FOR 1 SQ.M (AT THE RATE OF 67 CU.DECI M/SQ.M)						
	PREMIX AS PER MS1-005C	0.07	CU.M	MS1-005C	1,085.81		
				MS1-005D	1,085.81		
	TOTAL COST PER 1 SQ.M R1-905M(A)+(B)+(D)				1,677.82		
	RATE PER 1 SQ.M			MS1-005	1,677.82		
				SAY	1,677.80	813.62	864.18
MS1-006	PATCHING POTHLES USING PLANT MADE BITUMEN BOUND BASE (WITH 60/70 BINDER) INCLUDING SEALING THE PATCHING WITH EMULSION(CRS-1) PAINTING @ 7.3 LTR/M.TON, COVER WITH SAND (SUPPLY AND TRANSPORT OF PREMIX TO BE PAID SEPARATELY):						
	DATA PER 3 M.TONS						
	PREMIX (BASE COURSE)(EX PLANT)	3.00	M.TON	B0-362	-		
	EMULSTION (CRS-1)	21.90	LTR	B0-353	2,062.54		
	SAND	0.37	CU.M	B0-331	1,471.60		
	LABOUR (S/SK)	3.00	DAY	B0-003	4,800.00		
	LABOUR (U/SK)	3.00	DAY	B0-004	4,582.02		
	TOOLS 2.5% OF LABOUR				234.55		
					13,150.71		
	RATE PER 3 M.TONS				13,150.71		
	RATE PER 1 M.TON			MS1-006	4,383.57		
				SAY	4,383.55	3,127.34	1,256.21

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-007	PATCHING POT HOLES OF MEDIUM DEPTH OF 20-75 MM USING GRADED AGGREGATE 19 -12.5 MM USING HOT BITUMEN(80/100) @ 2 LTR/SQ.M COVERED WITH BLOTTON MATERIAL AT THE RATE OF 1 CU.M/125 SQ.M, INCLUDING PREPARATION OF SURFACE TACK COAT WITH (CSS-1) AT .75 LTR/SQ.M, TRIMMING SIDES, LAYING AGGREGATE, TAMPING ETC. COMPLETE (RATE INCLUSIVE OF AGGREGATE & TACK COAT BUT EXCL. TRANSPORT OF AGGREGATE & BITUMEN):						
	DATA FOR 1 SQ.M						
(A)	PREP. OF POT HOLES AS PER MS1-005A	1.00	SQ.M	MS1-005A	176.94		
(B)	PATCHING POT HOLES INCLUDING TACK COAT TACK COAT AS PER MS1-005B	1.00	SQ.M	MS1-005B	415.06		
(C)	GRADED AGGREGATE 19 MM	0.07	CU.M	B0-308A	194.46		
(D)	BITUMEN 2 LTR/SQ.M COVERED WITH SAND AS PER S1-001	1.00	SQ.M	S1-001	247.83		
	TOTAL COST PER 1 SQ.M				1,034.30		
	RATE PER 1 SQ.M			MS1-007	1,034.30		
				SAY	1,034.30	550.02	484.28
MS1-008	PATCHING DEEP POT HOLES DEEPER THAN 75 MM WITH C/B PREMIX MATERIAL (SITE MADE) TO A DEPTH OF 37.5 MM (OVER THE ALREADY PREPARED SURFACE WITH AGGREGATE AND GRAVEL PAID SEPARATELY) USING 10-20% CUT BACK BITUMEN AT THE RATE OF 83.5 LTR/CU.M OF 19 MM AND DOWN GRADED AGGREGATE INCL. PREPARATION OF SURFACE, TACK COAT WITH EMULSION (CSS-1) .75 LTR/SQ.M., TRIMMING SIDES, LAYING PREMIX, TAMPING ETC. COMPLETE (RATE INCLUSIVE OF PREMIX MADE AT SITE AND TACK COAT) (EXCL. TRANSPORT OF AGGREGATE & BITUMEN):						
(A)	PATCHING POT HOLES INCLUDING TACK COAT AS PER MS1-005B	1.00	SQ.M	MS1-005B	415.06		
(B)	PREMIX (WITH 10-20% CUT BACK) AS PER MS1-005C	0.03	CU.M	MS1-005C	534.80		
	COST PER 1 SQ.M (A + B)				949.87		
	RATE PER 1 SQ.M			MS1-008	949.87		
				SAY	949.85	486.54	463.31

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-009	PATCHING POT HOLES MORE THAN 75 MM DEEP WITH WATER BOUND GRAVEL MATERIAL USING 50 MM OR 12.5 MM SINGLE SIZE AGGREGATE ALONG WITH USEABLE OLD AGGREGATE OBTAINED FROM PICKING AND PREPARATION OF SURFACE INCLUDING. LAYING, WATERING, SPREADING GRAVEL OF APPROVED QUALITY AND TAMPING AS DIRECTED. (AGGREGATE AND GRAVEL WOULD BE PAID SEPARATELY): DATE FOR 279 SQ.M ----- LABOUR (U/SK) - CLEANING SURFACE LABOUR (S/SK) - SPREADING AGGREGATE LABOUR (S/SK) - FOR STAMPING ALLOW 2.5% ON LABOUR FOR TOOLS ALLOW FOR WATERING	3.00 1.00 5.00 2.83	DAYS DAY DAYS CU.M	B0-004 B0-003 B0-003 B0-785	4,582.02 1,600.00 8,000.00 354.55 66.93 ----- 14,603.50 ----- 14,603.50 RATE PER 1 SQ.M MS1-009 52.34 =====		
				SAY	52.35	50.83	1.52
MS1-010	PATCHING RUTS AND DEPRESSIONS UPTO 75 MM DEPTH USING SITE MADE COLD MIX(CUT BACK) MATERIAL WITH THE SURFACE AND EDGE PREPARED AS PER SPECIFICATIONS AND APPLICATION OF TACK COAT WITH EMULSION (CSS-1) AT .75 LTR/SQ.M., (EXCL. TRANSPORT OF AGGREGATE): (A) PREPARATION OF SURFACE FOR 279 SQ.M : LABOUR (U/SK) ALLOW 2.5% ON LABOUR FOR TOOLS	4.00	DAYS	B0-004	6,109.36 152.73 ----- 6,262.09 ----- 6,262.09 RATE PER 1 SQ.M MS1-010A 22.44 -----		
(B)	TACK COAT AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-010B	415.06 415.06 -----		
(C)	COLD MIX AT THE RATE OF 67 CU.DECI M/SQ.M AS PER MS1-005C	0.07	CU.M	MS1-005C MS1-010C	1,085.81 1,085.81 -----		
	TOTAL COST PER 1 SQ.M - MS1-010(A)+(B)+(C)				1,523.32 -----		
	RATE PER 1 SQ.M			MS1-010 SAY	1,523.32 =====	662.89	860.41

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-011	PATCHING RUTS AND DEPRESSIONS UPTO 75 MM DEPTH USING PLANT MADE COLD MIX(60/70 CUT BACK) MATERIAL WITH THE SURFACE AND EDGE PREPARED AS PER SPECIFICATIONS AND APPLICATION OF TACK COAT WITH EMULSION (CSS-1) @ .75 LTR/SQ.M (COLD MIX SUPPLY AND TRANSPORT TO BE PAID SEPARATELY):						
(A)	PREPARATION OF SURFACE FOR 1 SQ.M AS PER MS1-010A	1.00	SQ.M	MS1-010A MS1-011A	22.44 22.44		
(B)	TACK COAT AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-011B	415.06 415.06		
(C)	PLANT MADE COLD MIX FOR 1 SQ.M	0.10	M.TON	B0-365 MS1-011C	- -		
	SUB TOTAL						
	TOTAL COST PER 1 SQ.M - MS1-011(A)+(B)+(C)				437.51		
	RATE PER 1 SQ.M			MS1-011 SAY	437.51 437.50		
						358.53	78.97
MS1-012	PATCHING RUTS AND DEPRESSIONS DEEPER THAN 75 MM THE SURFACE AND EDGES PREPARED AS PER SPECIFICATION TACK COAT WITH EMULSION(CSS-1) @ .75 LTR/SQ.M, TRIMMING SIDES, 50 MM DOWN GAUGE AGGREGATED LAID AND COMPACTED AND THE TOP 40 MM LAID AND COMPACTED WITH SITE MADE COLD MIX(CUT BACK) MATERIAL (SUPPLY OF 50 MM DOWN GAUGE AND TRANSPORT OF ALL AGGREGATE WILL BE PAID SEPARATELY)						
(A)	PREPARATION OF SURFACE PER 1 SQ.M: AS PER MS1-010A	1.00	SQ.M	MS1-010A MS1-012A	22.44 22.44		
(B)	APPLICATION OF TACK COAT (AT .75 LTR/SQ.M) AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-012B	415.06 415.06		
(C)	LAYING & COMPACTING 50 MM DOWN GAUGE AGGREGATE: DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - FILLING AGGREGATE	2.00	DAYS	B0-003	3,200.00		
	LABOUR (S/SK) - FOR STAMPING	4.00	DAYS	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS BASKET	0.50	NO	B0-631	240.00 130.00		
					9,970.00		
	COST PER 2.83 CU.M				9,970.00		
	RATE PER 1 CU.M			MS1-012C1	3,522.97		
	COST FOR .076 CU.M			MS1-012C	267.75		
(D)	PREMIX (WITH 10-20% CUT BACK) AS PER MS1-005C	0.03	CU.M	MS1-005C MS1-012D	534.80 534.80		
	TOTAL COST PER 1 SQ.M - MS1-012(A)+(B)+(C)+(D)				1,240.06		
	RATE PER SQ.M			MS1-012 SAY	1,240.06 1,240.05		
						766.25	473.80

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-013	PATCHING RUTS AND DEPRESSIONS UPTO 75 MM DEPTH THE SURFACE AND EDGES PREPARED AS PER SPECIFICATION AND APPLICATION OF TACK COAT WITH EMULSION(CSS-1) AT .75 LTR/SQ.M 50 MM DOWN GAUGE AGGREGATED LAID AND COMPACTED USING HOT BITUMEN(80/100) @ 2 LTR/SQ.M, COVERED WITH BLOTTON MATERIAL (SAND) AT THE RATE OF 1 CU.M/125 SQ.M (AGGREGATE WILL BE PAID SEPARATELY):						
	DATA FOR 1 SQ.M						
(A)	PREPARATION OF SURFACE AS PER MS1-010A	1.00	SQ.M	MS1-010A MS1-013A	22.44 22.44		
(B)	APPLICATION OF TACK COAT (AT .75 LTR/SQ.M) AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-013B	415.06 415.06		
(C)	LAYING & COMPACTING 50 MM DOWN GAUGE AGGREGATE AS PER MS1-012C1	0.07	CU.M	MS1-012C1 MS1-013C	236.04 236.04		
(D)	BITUMEN 2 LTR/SQ.M COVERED WITH SAND AS PER S1-001	1.00	SQ.M	S1-001 MS1-013D	247.83 247.83		
	TOTAL COST PER 1 SQ.M - MS1-013(A)+(B)+(C)+(D)				921.37		
	RATE PER SQ.M			MS1-013	921.37		
				SAY	921.35	626.57	294.78
MS1-014	PATCHING RUTS AND DEPRESSIONS DEEPER THAN 75 MM DEPTH THE SURFACE AND EDGES PREPARED AS PER SPECIFICATION AND APPLICATION OF TACK COAT WITH EMULSION(CSS-1) AT .75 LTR/SQ.M 50 MM DOWN GAUGE AGGREGATED LAID AND COMPACTED USING HOT BITUMEN(80/100) @ 2 LTR/SQ.M., COVERED WITH BLOTTON MATERIAL (SAND) AT THE RATE OF 1 CU.M/125 SQ.M (AGGREGATE WILL BE PAID SEPARATELY):						
	DATA FOR 1 SQ.M						
(A)	PREPARATION OF SURFACE AS PER MS1-010A	1.00	SQ.M	MS1-010A MS1-014A	22.44 22.44		
(B)	APPLICATION OF TACK COAT (AT .75 LTR/SQ.M) AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-014B	415.06 415.06		
(C)	LAYING & COMPACTING 50 MM DOWN GAUGE AGGREGATE AS PER MS1-012C1	0.10	CU.M	MS1-012C1 MS1-014C	352.30 352.30		
(D)	BITUMEN 2 LTR/SQ.M COVERED WITH SAND AS PER S1-001	1.00	SQ.M	S1-001 MS1-014D	247.83 247.83		
	TOTAL COST PER 1 SQ.M - MS1-014(A)+(B)+(C)+(D)				1,037.63		
	RATE PER 1 SQ.M			MS1-014	1,037.63		
				SAY	1,037.65	738.52	299.13

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-015	CORRECTING & STRENGTHENING THE EDGES OF ROAD WITH SITE MADE COLD MIX 40MM THICK PREPARED USING CUT BACK BITUMEN 10-20% AT THE RATE OF 83.5 LTR/CU.M OF 19 MM AND DOWN GAUGE AGGREGATE OVER A TACK COAT USING WITH EMULSION .75 LTR/SQ.M LAID OVER 50 MM AND DOWN GAUGE AGGREGATE LAID, ON POSITION WATERED AND COMPACTED INCLUDING EARTH WORK EXCAVATION TO A WIDTH OF 225 MM AND DEPTH OF 125 MM. (COST OF AGGREGATE AND TRANSPORT TO BE PAID SEPARATELY) :						
	DATA FOR 1 SQ.M						
(A)	EARTH WORK EXCAVATION TO A DEPTH OF .125 M AND WIDTH .225 M AS PER E1-003	0.13	CU.M	E1-003 MS1-015A	107.55 107.55		
(B)	LAYING 50 MM DOWN GAUGE AGGREGATE & COMPACTION : DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - LAYING	2.00	DAYS	B0-003	3,200.00		
	LABOUR (S/SK) - COMPACTING	4.00	DAYS	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				240.00		
	WATERING	1.00	ITEM	B0-785	23.65		
	BASKET	0.50	NO.	B0-631	130.00		
					9,993.65		
	COST PER 2.83 CU.M				9,993.65		
	RATE PER 1 CU.M			MS1-015B1	3,531.33		
	COST FOR 0.125 CU.M	0.13	CU.M	MS1-015B	441.42		
(C)	TACK COAT WITH EMULSION AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-015C	415.06 415.06		
(D)	COLD MIX 40 MM THICK AS PER MS1-005C	0.03	CU.M	MS1-005C MS1-015D	534.80 534.80		
	TOTAL COST PER 1 SQ.M - MS1-015(A)+(B)+(C)+(D)				1,498.83		
	RATE PER 1 SQ.M			MS1-015	1,498.83		
				SAY	1,498.85	1,011.76	487.09

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-016	CORRECTING & STRENGTHENING THE EDGES OF ROAD WITH SITE MADE COLD MIX 40 MM THICK PREPARED USING CUTBACK BITUMEN 10-20% AT THE RATE OF 83.5 LTR/CU.M OF 19 AND DOWN GAUGE AGGREGATE OVER A TACK COAT WITH EMULSION .75 LTR/SQ.M LAID OVER 50 MM AND DOWN GAUGE AGGREGATE LAID, ON POSITION WATERED AND COMPACTED WITH A BOTTOM LAYER OF 100 MM AGGREGATE CLOSELY PACT, INCLUDING EARTH WORK EXCAVATION TO A WIDTH OF 225 MM AND DEPTH OF 225 MM (AGGREGATE 100 MM, 50 MM DOWN GAUGE AND TRANSPORT WILL BE PAID SEPARATELY):						
	DATA FOR 1 SQ.M						
(A)	EARTH WORK EXCAVATION TO A DEPTH OF .225 M AND WIDTH .225 M AS PER E1-003	0.23	CU.M	E1-003 MS1-016A	193.59 193.59		
(B)	LAYING 100 MM AGGREGATE : DATA FOR 2.83 CU.M						
	LAYING OF 100 MM AGGREGATE	2.50	DAYS	B0-003	4,000.00		
	LABOUR (S/SK) - FOR PACKING				100.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS	0.50	NO.	B0-631	130.00		
	BASKET						
					4,230.00		
	COST PER 2.83 CU.M				4,230.00		
	RATE PER 1 CU.M			MS1-016B1	1,494.70		
	COST FOR 0.1 CU.M	0.10	CU.M	MS1-016B	149.47		
(C)	50 MM DOWN GAUGE AGGREGATE LAID WATERED & COMPACT. AS PER MS1-015B1	0.13	CU.M	MS1-015B1 MS1-016C	441.42 441.42		
(D)	TACK COAT WITH EMULSION AS PER MS1-005B	1.00	SQ.M	MS1-005B MS1-016D	415.06 415.06		
(E)	COLD MIX 40 MM THICK AS PER MS1-005C	0.03	CU.M	MS1-005C MS1-016E	534.80 534.80		
	TOTAL COST PER 1 SQ.M - MS1-015(A)+(B)+(C)+(D)+(E)				1,734.34		
	RATE PER 1 SQ.M			MS1-016	1,734.34		
				SAY	1,734.35	1,234.06	500.29

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-017	PATCH SEALING WITH EMULSION PAINTING THE SURFACE BY SPRAY OF CRS-1 AT THE RATE OF .75 LTR/SQ.M SQUEEGING THE EMULSION AND SPREADING THE BLOTTON MATERIAL (SAND) AT THE RATE OF 1 CU.M/125 SQ.M :						
	DATA FOR 279 SQ.M						
	LABOUR (S/SK)	4.00	DAYS	B0-003	6,400.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 20% ON LABOUR FOR LOSS OF WORKING HOURS				1,432.73		
	ALLOW 2.5% ON LABOUR FOR TOOLS				179.09		
	EMULSION (CRS-1)	209.25	LTR	B0-353	19,707.17		
	SAND	2.23	CU.M	B0-331	8,928.00		
	BASKET (1/3)	0.33	NO.	B0-631	86.67		
					37,497.33		
	COST PER 279 SQ.M				37,497.33		
	RATE PER 1 SQ.M			MS1--017	134.40		
				SAY	134.40	25.68	108.72
MS1-018	PATCH SEALING WITH HOT BITUMEN PAINTING THE SURFACE BY USING .75 LTR/SQ.M SQUEEGING THE BITUMEN AND SPREADING THE BLOTTON MATERIAL (SAND) AT THE RATE OF 1 CU.M/125 SQ.M (TRANSPORT OF BITUMEN PAID SEPARATELY):						
	DATA FOR 279 SQ.M						
	LABOUR (S/SK)	4.00	DAYS	B0-003	6,400.00		
	LABOUR (U/SK)	0.50	DAY	B0-004	763.67		
	ALLOW 20% ON LABOUR FOR LOSS OF WORKING HOURS				1,432.73		
	ALLOW 2.5% ON LABOUR FOR TOOLS				179.09		
	BITUMEN	209.25	LTR	B0-351	17,995.50		
	TAR BOILER	0.50	DAY	B0-101	50.00		
	SAND	2.23	CU.M	B0-331	8,928.00		
	FIREWOOD	0.25	CU.M	B0-395	379.15		
	BASKET (1/3)	0.33	NO.	B0-631	86.67		
					36,214.81		
	COST PER 279 SQ.M				36,214.81		
	RATE PER 1 SQ.M			MS1-018	129.80		
				SAY	129.80	25.68	104.12

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-019	PATCH SEALING OF PITTED SURFACE USING HOT SAND BITUMEN(80/100) MIX 104 LTR/CU.M OF SAND SPREAD AND HAND TAMPED INCLUDING BRUSHING AND CLEANING THE SURFACE BEFORE APPLICATION (EXCLUDING TRANSPORT OF BITUMEN):						
(A)	PREPARING SAND BITUMEN MIX : DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - HEATING	1.00	DAY	B0-003	1,600.00		
	LABOUR (U/SK) - MIXING	6.00	DAYS	B0-004	9,164.04		
	ALLOW 2.5% ON LABOUR FOR TOOLS				269.10		
	BITUMEN	294.32	LTR	B0-351	25,311.52		
	TAR BOILER	0.50	DAY	B0-101	50.00		
	SAND	2.83	CU.M	B0-331	11,320.00		
	FIREWOOD	0.38	CU.M	B0-395	574.46		
	BASKET (2/3)	0.67	NO.	B0-631	173.33		
					48,462.46		
	COST PER 2.83 CU.M				48,462.46		
	RATE PER 1 CU.M			MS1-019A	17,124.54		
(B)	CLEANING, BRUSHING, SPREADING & TAMPING : DATA FOR 279 SQ.M						
	LABOUR (U/SK) - CLEANING & BRUSHING	3.00	DAYS	B0-004	4,582.02		
	LABOUR (S/SK) - SPREAD. & TAMPING	5.00	DAYS	B0-003	8,000.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				314.55		
					12,896.57		
	COST PER 279 SQ.M				12,896.57		
	RATE PER 1 SQ.M			MS1-019B	46.22		
(C)	SAND BITUMEN MIX @ RATE OF .015 CU.M PER SQ.M, AS PER MS1-019A	0.02	CU.M	MS1-019A	256.87		
				MS1-019C	256.87		
	TOTAL COST PER 1 SQ.M MS1-019(B)+(C)				303.09		
	RATE PER 1 SQ.M			MS1-019	303.09		
				SAY	303.10	102.15	200.95

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-020	PATCH SEALING OF PITTED SURFACES WITH A EMULSION SAND SLURRY USING CRS 1 OR 2 AT THE RATE OF 136.5 LTR/CU.M OF SAND MIX PROPERLY LAID, LEVELLED & SQUEEGED INCLUDING BRUSHING AND CLEANING THE SURFACE BEFORE APPLICATION:						
(A)	PREPARING EMULSION-SAND SLURRY: DATA FOR 2.83 CU.M						
	LABOUR (S/SK) - FOR MIXING	4.00	DAYS	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				160.00		
	EMULSION (CRS-1)	386.30	LTR	B0-353	36,381.26		
	HIRE OF MIXER	0.50	DAY	B0-102	3,678.16		
	SAND	2.83	CU.M	B0-331	11,320.00		
	BASKET (2/3)	0.67	NO.	B0-631	173.33		
					58,112.76		
	COST PER 2.83 CU.M				58,112.76		
	RATE PER 1 CU.M			MS1-020A	20,534.54		
(B)	CLEANING, BRUSHING, LAYING ETC.: DATA FOR 279 SQ.M						
	LABOUR (U/SK) - CLEANING & BRUSHING	3.00	DAYS	B0-004	4,582.02		
	LABOUR (S/SK) FOR LAYING AND LEVELING ETC.	4.00	DAYS	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				274.55		
					11,256.57		
	COST PER 279 SQ.M				11,256.57		
	RATE PER 1 SQ.M			MS1-020B	40.35		
(C)	SAND EMULSION MIX (10-20 MM THICK) AT THE RATE OF .015 CU.M/SQ.M, AS PER MS1-020A	0.02	CU.M	MS1-020A	308.02		
				MS1-020C	308.02		
	TOTAL COST PER 1 SQ.M MS1-020: (B)+(C)				348.36		
	RATE PER 1 SQ.M			MS1-020	348.36		
				SAY	348.35	73.28	275.08
MS1-021	GENERAL UPKEEP OF ROAD SIDES INCLUDING MAINTAINING THE RIGHT OF WAY IN A NEAT CONDITION BY TRIMMING, WEEDING & CLEARING OF THE ROAD SIDES, DRAINS, DRAINAGE STRUCTURES, SCUPPER DRAINS AND CLEANING MINOR SLIPS:						
	DATA FOR 74 SQ.M						
	LABOUR (U/SK) TRIMMING	1.00	DAY	B0-004	1,527.34		
	LABOUR (U/SK)	0.25	DAY	B0-004	381.84		
	ALLOW 2.5% ON LABOUR FOR TOOLS				47.73		
	BASKET (1/10)	0.10	NO.	B0-631	26.00		
					1,982.90		
	COST FOR 74 SQ.M				1,982.90		
	RATE PER 1 SQ.M			MS1-021	26.80		
				SAY	26.80	25.80	1.00

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-022	CLEANING ORDINARY JUNGLE INCLUDING REMOVING HIGH GROWING PLANTS AND TREES OF GIRTH LESS THAN 300 MM OTHER THAN THOSE DESIGNATED TO REMAIN, BY UPROOTING OR BY CUTTING AND THEN UPROOTING THE STUMPS OR BY CUTTING ONLY AS DIRECTED.(SSCM 1203.2):						
	DATA FOR 4905 SQ.M						
	LABOUR (S/SK)	3.00	DAYS	B0-003	4,800.00		
	LABOUR (U/SK)	7.00	DAYS	B0-004	10,691.38		
	ALLOW 2.5% ON LABOUR FOR TOOLS				387.28		
					15,878.66		
	COST FOR 4905 SQ.M				15,878.66		
	RATE PER 1 SQ.M			MS1-022	3.24		
				SAY	3.25	3.16	0.09
MS1-023	CLEARING MEDIUM JUNGLE INCLUDING REMAINING ALL HIGH GROWING PLANTS AND TREES OF GIRTH LESS THAN 300 MM OTHER THAN THOSE DESIGNATED TO REMAIN, BY UPROOTING OR BY CUTTING AND THEN UPROOTING THE STUMPS OR BY CUTTING ONLY AS DIRECTED:						
	DATA FOR 4905 SQ.M						
	LABOUR (S/SK)	3.00	DAYS	B0-003	4,800.00		
	LABOUR (U/SK)	11.00	DAYS	B0-004	16,800.74		
	ALLOW 2.5% ON LABOUR FOR TOOLS				540.02		
					22,140.76		
	COST FOR 4905 SQ.M				22,140.76		
	RATE PER 1 SQ.M			MS1-023	4.51		
				SAY	4.50	4.40	0.10
MS1-024	CLEARING HEAVY JUNGLE INCLUDING REMOVING ALL HIGH GROWING PLANTS AND TREES OF GIRTH LESS THAN 300 MM OTHER THAN THOSE DESIGNATED TO REMAIN, BY UPROOTING OR BY CUTTING AND THEN UPROOTING THE STUMPS OR BY CUTTING ONLY AS DIRECTED:						
	DATA FOR 4905 SQ.M						
	LABOUR (S/SK)	3.00	DAYS	B0-003	4,800.00		
	LABOUR (U/SK)	15.00	DAYS	B0-004	22,910.10		
	ALLOW 2.5% ON LABOUR FOR TOOLS				692.75		
					28,402.85		
	COST FOR 4905 SQ.M				28,402.85		
	RATE PER 1 SQ.M			MS1-024	5.79		
				SAY	5.80	5.65	0.15

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-025	REPAIRS TO DAMAGE OF SHOULDERS VERGES AND EMBANKMENTS SLOPES INCLUDING MAKING GOOD DEPRESSIONS, RUTS, HOLES AND ERROSION PATH WITH APPROVED GRAVELLY SOIL AND COMPACTING THE SAME WITH ROLLER (8-10TON)AS DIRECTED (GRAVELLY SOIL TO BE PAID SEPARATELY IF BROUGHT FROM OUTSIDE)[SSCM 1201.3]:						
	DATA FOR 5.66 CU.M						
	LABOUR U/SK	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.18		
	ROLLER (8-10 TONS)	0.10	DAY	B0-111	1,263.58		
	BASKET (1/3)	0.33	NO.	B0-631	86.67		
					2,915.77		
	COST FOR 5.66 CU.M				2,915.77		
	RATE PER 1 CU.M			MS1-025	515.15		
				SAY	515.15	269.85	245.30
MS1-026	REGRADING AND REGRAVELLING OF SHOULDERS WITH GRAVEL OF APPROVED QUALITY, DULY COMPACTED WITH ROLLER(8-10TONS) AS DIRECTED FOR REPAIRING HIGH SIDES CAUSED BY HEAVINGS DEPOSITS AND CONSTRUCTION DEBRIS, TO REQUIRED LEVELS BY USING A GRADER(120-140 HP) (GRAVEL TO BE PAID FOR SEPARATELY)[SSCM 1201.3(b)]:						
	DATA FOR .5 KM						
	ASSUMING 225 MM THICK ON EITHER SIDE 1.5 M WIDE QUANTITY OF EARTH WORK INVOLVED: = 500 X .225 X 3 = 337.5 CU.M						
	MOTOR GRADER (120-140 HP)	0.75	DAY	B0-114	32,871.62		
	ROLLER (8-10 TONS)	5.00	DAYS	B0-111	63,179.20		
	WATER	112.50	ITEM	B0-784	1,996.88		
					98,047.70		
	COST FOR 337.5 CU.M				98,047.70		
	RATE PER 1 CU.M			MS1-026	290.51		
				SAY	290.50	0.00	290.50
MS1-027	REGRADING AND REGRAVELLING OF SHOULDERS WITH GRAVEL OF APPROVED QUALITY, DULY COMPACTED WITH ROLLER(8-10TONS) AS DIRECTED FOR REPAIRING HIGH SIDES CAUSED BY HEAVINGS DEPOSITS AND CONSTRUCTION DEBRIS, TO REQUIRED LEVELS MANUALLY (GRAVEL(LOOSE VOLUME) TO BE PAID SEPARATELY) [SSCM 1201.3(b)]:						
	DATA FOR 19.8 CU.M						
	LABOUR (U/SK)	4.00	DAYS	B0-004	6,109.36		
	ALLOW 2.5% ON LABOUR FOR TOOLS				152.73		
	ROLLER	0.33	DAY	B0-111	4,169.83		
	BASKET	2.25	NOS	B0-631	585.00		
	WATER	19.80	ITEM	B0-784	351.45		
					11,368.37		
	COST FOR 19.8 CU.M				11,368.37		
	RATE PER 1 CU.M			MS1-027	574.16		
				SAY	574.15	308.55	265.60

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-028	REPLACING THE DAMAGE CRACKED CONCRETE SLABS IN THE FOOT WALKS WITH PRECAST/CAST INSITU CEMENT CONCRETE 1:2:4(19MM) USING 19 MM & DOWN GAUGE STONE AGGREGATE TO A MINIMUM THICKNESS OF 50 MM INCLUDING FIXING/LAYING IN POSITION WITH CEMENT MORTAR 1:3 JOINTS OVER A COMPACTED BED ETC. (EXCLUDING TRANSPORT OF AGGREGATE)[SSCM 1204.3]:						
	DATA FOR 9.29 SQ.M						
(A)	1:2:4(19 MM) MIX CONCRETE	0.45	CU.M	ST1-046	6,867.34		
(B)	SHUTTERING	0.62	SQ.M	ST1-064	846.61		
(C)	FIXING & LAYING: LABOUR (S/SK) LABOUR (U/SK) - FOR COMPACTION ALLOW 2.5% ON LABOUR FOR TOOLS	1.00 4.00	DAY DAYS	B0-003 B0-004	1,600.00 6,109.36 192.73		
					7,902.09		
	COST FOR 9.29 SQ.M				7,902.09		
(D)	GROUT. JOINTS WITH CEMENT MOTAR 1:3	9.29	SQ.M	ST1-013	3,597.55		
	TOTAL COST PER 9.29 SQ.M MS1-028(A)+(B)+(C)+(D)				19,213.59		
	RATE PER 1 SQ.M			MS1-028	2,068.20		
				SAY	2,068.20	1,354.19	714.01
MS1-029	CUTTING AND REMOVING FALLEN TREES UPTO 600 MM GIRTH INCLUDING CUTTING INTO REQUIRED NUMBER OF PIECES INCLUDING DISPOSAL AS DIRECTED. MINIMUM PIECE SHALL NOT BE LESS THAN 2.5 M IN LENGTH [SSCM 1203.2]:						
	FOR 4 NOS. CUT						
	LABOUR (U/SK) - CUTTING	0.75	DAY	B0-004	1,145.51		
	LABOUR (U/SK) - CLEANING	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				66.82		
					2,739.67		
	COST FOR 4 NOS				2,739.67		
	RATE PER 1 NO			MS1-029	684.92		
				SAY	684.90	668.21	16.69

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-030	CUTTING AND REMOVING FALLEN TREES 600-900 MM GIRTH INCLUDING CUTTING INTO REQUIRED NUMBER OF PIECES INCLUDING DISPOSAL AS DIRECTED. MINIMUM PIECE SHALL NOT BE LESS THAN 2 M [SSCM 1203.2]:						
	FOR 4 NOS. CUT						
	LABOUR (U/SK) - CUTTING	1.00	DAY	B0-004	1,527.34		
	LABOUR (U/SK) - CLEANING	1.50	DAY	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.46		
					3,913.81		
	COST FOR 4 NOS				3,913.81		
	RATE PER 1 NO			MS1-030	978.45		
				SAY	978.45	954.59	23.86
MS1-031	WEEDING MASONRY CULVERTS SMALL BRIDGES AND RETAINING WALLS [SSCM 1303.3]:						
	DATA FOR 10 CULVERTS						
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				40.00		
	ALLOW FOR BARRICADING	1.00	ITEM	B0-704	48.20		
					1,688.20		
	COST PER 10 CULVERTS				1,688.20		
	RATE PER CULVERT			MS1-031	168.82		
				SAY	168.80	160.00	8.80
MS1-032	MASONRY RANDOM RUBBLE WITH BOULDERS INCLUDING COLLECT[SSCM 1006.3(b)]:						
	DATA FOR 8.5 CU.M						
	MASON (SK/A)	2.00	DAYS	B0-001	3,800.00		
	LABOUR (S/SK)	2.00	DAYS	B0-003	3,200.00		
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				251.37		
	BASKET	1.00	NO	B0-631	260.00		
					10,566.05		
	COST PER 8.5 CU.M				10,566.05		
	RATE PER 1 CU.M			MS1--032	1,243.06		
				SAY	1,243.05	1,182.90	60.15

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-033	FIXING CATS EYES IN TAR MACADAM INCLUDING BREAKING ROAD SURFACE, BARRICADE ETC. [SSCM 810.3(C)]:						
	DATA FOR 10 NOS.						
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	LABOUR (SK/B)	0.50	DAY	B0-002	850.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				78.53		
	ADD 10% ON LABOUR FOR BARRICADING				314.10		
					3,533.64		
	COST PER 10 NOS.				3,533.64		
	RATE PER 1 NO.			MS1-033	353.36		
				SAY	353.35	314.10	39.25
MS1-034	REDUCING HIGH SIDES IN ORDINARY SOIL [SSCM 301.3/1201.3 (c)]:						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				38.18		
	BASKETS	0.50	NO	B0-631	130.00		
					1,695.52		
	COST PER 2.83 CU.M				1,695.52		
	RATE PER 1 CU.M			MS1-034	599.12		
				SAY	599.10	539.70	59.40
MS1-035	REDUCING HIGH SIDES IN MEDIUM SOIL:						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	1.50	DAYS	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS				57.28		
	BASKETS	0.50	NO	B0-631	130.00		
					2,478.29		
	COST PER 2.83 CU.M				2,478.29		
	RATE PER 1 CU.M			MS1-035	875.72		
				SAY	875.70	809.54	66.16
MS1-036	REDUCING HIGH SIDES IN HARD SOIL:						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	ALLOW 2.5% ON LABOUR FOR TOOLS				76.37		
	BASKETS	0.50	NO.	B0-631	130.00		
					3,261.05		
	COST PER 2.83 CU.M				3,261.05		
	RATE PER 1 CU.M			MS1-036	1,152.31		
				SAY	1,152.30	1,079.39	72.91

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-037	REDUCING HIGH SIDES IN SOFT ROCK:						
	DATA FOR 2.83 CU.M						
	LABOUR (U/SK)	2.50	DAYS	B0-004	3,818.35		
	ALLOW 2.5% ON LABOUR FOR TOOLS				95.46		
	BASKETS	0.50	NO.	B0-631	130.00		
					4,043.81		
	COST PER 2.83 CU.M				4,043.81		
	RATE PER 1 CU.M			MS1-037	1,428.91		
				SAY	1,428.90	1,349.24	79.66
MS1-038	REDUCING HIGH SIDES IN ROCK REQUIRING BLASTING:						
	DATA FOR 2.83 CU.M						
	LABOUR (SK/B)	1.00	DAY	B0-002	1,700.00		
	LABOUR (U/SK)	2.00	DAYS	B0-004	3,054.68		
	ALLOW 40% LOSS ON LABOUR CONTROL				1,901.87		
	ALLOW 2.5% ON LABOUR FOR TOOLS				118.87		
	BASKETS (1/3)	0.33	NO.	B0-631	86.67		
	JUMPER STEEL	0.45	KG	B0-503	118.96		
	BLASTING POWDER	0.34	KG	B0-501	201.79		
	FUSE	3.05	M	B0-502	1,183.40		
					8,366.23		
	COST PER 2.83 CU.M				8,366.23		
	RATE PER 1 CU.M			MS1-038	2,956.27		
				SAY	2,956.25	1,680.10	1,276.15
MS1-039	WHITE WASHING 1 COAT TO PARAPETS OF BRIDGES AND CULVERTS.[SSCM 1403.3(e)]:						
	DATA FOR 93 SQ.M						
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				78.18		
	BOILED LIME	18.75	KG	B0-537	449.06		
	COMMON SALT	0.45	KG	B0-634	33.75		
	BASKETS (1/15)	0.07	NO.	B0-631	17.33		
	ALLOW FOR LADDERS	1.00	ITEM	B0-732	152.00		
					3,857.67		
	COST PER 93 SQ.M				3,857.67		
	RATE PER 1 SQ.M			MS1-039	41.48		
				SAY	41.50	33.63	7.87

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-040	WHITE WASHING 2 COATS TO PARAPETS OF BRIDGES AND CULVERTS:						
	DATA FOR 93 SQ.M						
	LABOUR (S/SK)	1.75	DAYS	B0-003	2,800.00		
	LABOUR (U/SK)	1.75	DAYS	B0-004	2,672.85		
	ALLOW 2.5% ON LABOUR FOR TOOLS				136.82		
	BOILED LIME	31.25	KG	B0-537	748.44		
	COMMON SALT	0.80	KG	B0-634	60.00		
	BASKETS (1/8)	0.13	NO.	B0-631	32.50		
	ALLOW FOR LADDERS	1.00	ITEM	B0-732	152.00		
					6,602.60		
	COST PER 93 SQ.M				6,602.60		
	RATE PER 1 SQ.M			MS1-040	71.00		
				SAY	71.00	58.85	12.15
MS1-041	WHITE WASHING 1 COAT TO PARAPETS OF BRIDGES AND CULVERTS AFTER CLEANING ATTENDING TO MINOR REPAIRS:						
	DATA FOR 93 SQ.M						
	LABOUR (SK/B)	1.00	DAY	B0-002	1,700.00		
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	ALLOW 2.5% ON LABOUR FOR TOOLS				80.68		
	BOILED LIME	18.75	KG	B0-537	449.06		
	COMMON SALT	0.45	KG	B0-634	33.75		
	BASKETS (1/15)	0.07	NO.	B0-631	17.33		
	ALLOW FOR LADDERS	1.00	ITEM	B0-732	152.00		
	ALLOW FOR MINOR REPAIRS	10.00	ITEM	B0-718	1,122.50		
					5,082.67		
	COST PER 93 SQ.M				5,082.67		
	RATE PER 1 SQ.M			MS1-041	54.65		
				SAY	54.65	34.70	19.95
MS1-042	WHITE WASHING 2 COATS TO PARAPETS OF BRIDGES AND CULVERTS AFTER CLEANING ATTENDING TO MINOR REPAIRS:						
	DATA FOR 93 SQ.M						
	LABOUR (SK/B)	1.75	DAYS	B0-002	2,975.00		
	LABOUR (U/SK)	1.75	DAYS	B0-004	2,672.85		
	ALLOW 2.5% ON LABOUR FOR TOOLS				141.20		
	BOILED LIME	31.25	KG	B0-537	748.44		
	COMMON SALT	0.80	KG	B0-634	60.00		
	BASKETS (1/8)	0.13	NO.	B0-631	32.50		
	ALLOW FOR LADDERS	1.00	ITEM	B0-732	152.00		
	ALLOW FOR MINOR REPAIRS	10.00	ITEM	B0-718	1,122.50		
					7,904.48		
	COST PER 93 SQ.M				7,904.48		
	RATE PER 1 SQ.M			MS1-042	84.99		
				SAY	85.00	60.73	24.27

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-043	PAINING WITH EMULSION 1 COAT TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS AFTER CLEANING AND ATTENDING TO MINOR REPAIRS.[SSCM 1501.3(a)-(v)]:						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.44	DAY	B0-002	748.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				18.70		
	EMULSION PAINT	0.75	LTR	B0-544	565.50		
	ALLOW FOR MINOR REPAIRS	1.00	ITEM	B0-718	112.25		
	ALLOW FOR SAND PAPER ETC.	1.00	ITEM	B0-751	147.05		

					1,591.50		

	COST PER 9.29 SQ.M				1,591.50		
	RATE PER 1 SQ.M			MS1-043	171.31		
					=====		
				SAY	171.30	80.52	90.78
MS1-044	PAINING WITH ENAMEL 1 COAT TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS AFTER CLEANING AND ATTENDING TO MINOR REPAIRS.[SSCM 1501.3(a)-(v)]:						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.44	DAY	B0-002	748.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				18.70		
	ENAMEL PAINT	0.77	LTR	B0-541	581.50		
	ALLOW FOR MINOR REPAIRS	1.00	ITEM	B0-718	112.25		
	ALLOW FOR SAND PAPER ETC.	1.00	ITEM	B0-751	147.05		

					1,607.50		

	COST PER 9.29 SQ.M				1,607.50		
	RATE PER 1 SQ.M			MS1-044	173.04		
					=====		
				SAY	173.05	80.52	92.53
MS1-045	PAINING WITH ENAMEL 2 COATS TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS AFTER CLEANING AND ATTENDING TO MINOR REPAIRS.[SSCM 1501.3(a)-(v)]:						
	DATA FOR 9.29 SQ.M						
	PAINTER (SK/B)	0.82	DAY	B0-002	1,394.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				34.85		
	ENAMEL PAINT(.77+.55)	1.32	LTR	B0-541	996.86		
	ALLOW FOR MINOR REPAIRS	1.00	ITEM	B0-718	112.25		
	ALLOW FOR SAND PAPER ETC.	1.00	ITEM	B0-751	147.05		

					2,685.01		

	COST PER 9.29 SQ.M				2,685.01		
	RATE PER 1 SQ.M			MS1-045	289.02		
					=====		
				SAY	289.00	150.05	138.95

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-046	PAINING WITH EMULSION 2 COATS TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS AFTER CLEANING AND ATTENDING TO MINOR REPAIRS: DATA FOR 9.29 SQ.M ----- PAINTER (SK/B) ALLOW 2.5% ON LABOUR FOR TOOLS EMULSION PAINT ALLOW FOR MINOR REPAIRS ALLOW FOR SAND PAPER ETC.	0.82 1.40 1.00 1.00	DAY LTR ITEM ITEM	B0-002 B0-544 B0-718 B0-751	1,394.00 34.85 1,055.60 112.25 147.05 ----- 2,743.75 ----- 2,743.75		
	COST PER 9.29 SQ.M				295.34		
	RATE PER 1 SQ.M			MS1-046	=====		
				SAY	295.35	150.05	145.30
MS1-047	PAINING 1 COAT EMULSION PAINT TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS INCLUDING PREPARING SURFACE OF OLD WORK.[SSCM 1501.3(b)(v)]: DATA FOR 9.29 SQ.M ----- PAINTER (SK/B) ALLOW 2.5% ON LABOUR FOR TOOLS EMULSION PAINT ALLOW FOR SAND PAPER ETC.	0.44 0.75 1.00	DAY LTR ITEM	B0-002 B0-544 B0-751	748.00 18.70 565.50 147.05 ----- 1,479.25 ----- 1,479.25		
	COST PER 9.29 SQ.M				159.23		
	RATE PER 1 SQ.M			MS1-047	=====		
				SAY	159.25	80.52	78.73
MS1-048	PAINING SUB COAT EMULSION PAINT TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS INCLUDING PREPARING SURFACE SSCM 1501.3(b): DATA FOR 9.29 SQ.M ----- PAINTER (SK/B) ALLOW 2.5% ON LABOUR FOR TOOLS EMULSION PAINT ALLOW FOR SAND PAPER/COTTON ETC.	0.38 0.65 1.00	DAY LTR ITEM	B0-002 B0-544 B0-751	646.00 16.15 490.10 147.05 ----- 1,299.30 ----- 1,299.30		
	COST PER 9.29 SQ.M				139.86		
	RATE PER 1 SQ.M			MS1-048	=====		
				SAY	139.85	69.54	70.31

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CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-049	PAINING 1 COAT EMULSION PAINT TO PARAPETS OF BRIDGES AND CULVERTS, GUARD STONES AND K.M. POSTS INCLUDING PREPARING SURFACE OF NEW WORK.[S.S.C.M. 1501.3 (b)(v)]:						
	DATA FOR 9.29 SQ.M						
	Painter (SK/B)	0.38	DAY	B0-002	646.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				16.15		
	EMULSION PAINT	0.75	LTR	B0-544	565.50		
	ALLOW FOR SAND PAPER/COTTON	1.00	ITEM	B0-751	147.05		
					1,374.70		
	COST PER 9.29 SQ.M				1,374.70		
	RATE PER 1 SQ.M			MS1-049	147.98		
				SAY	148.00	69.54	78.46
MS1-050	CLEANING & PAINTING 100 MM WIDE STRIPE FOR SKIRTING TO GUARD STONES.[SSCM 1501.3(b)(v)]:						
	DATA FOR 91.5 LINEAR METRES						
	LABOUR (S/SK)	2.25	DAYS	B0-003	3,600.00		
	LABOUR (U/SK)	2.25	DAYS	B0-004	3,436.52		
	ALLOW 2.5% ON LABOUR FOR TOOLS				175.91		
	COAL TAR	0.75	LTR	B0-531	75.00		
					7,287.43		
	COST PER 91.5 M				7,287.43		
	RATE PER 1 M			MS1-050	79.64		
				SAY	79.65	76.90	2.75
MS1-051	PAINING 2 COATS STANDARD PEDESTRIAN CROSSING FOR CARRIAGEWAY. [SSCM 810.2(c)]:						
	DATA FOR 3.66 M WIDE CARRIAGEWAY (AVE. SQ.M)	9.74					
	Painter (SK/A)	1.38	DAY	B0-001	2,612.50		
	LABOUR (U/SK)	1.38	DAY	B0-004	2,100.09		
	ALLOW 2.5% ON LABOUR FOR TOOLS				117.81		
	ALLOW FOR BARRICADING	1.00	ITEM	B0-704	48.20		
	ENAMEL PAINT @ RATE OF 6.0 SQ.M/LTR	1.62	LTR	B0-541	1,226.01		
					6,104.62		
	COST PER 3.66 M				6,104.62		
	RATE PER 1 M			MS1-051	1,667.93		
				SAY	1,667.95	1,287.59	380.36

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NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-052	PAINTING 1 COAT STANDARD PEDESTRIAN CROSSING FOR CARRIAGEWAY USING ROAD MARKING PAINTS. [SSCM 810.2(c)]:						
	DATA FOR 3.66 M WIDE CARRIAGEWAY (AVE. SQ.M)	9.74					
	PAINTER (SK/A)	1.50	DAY	B0-001	2,850.00		
	LABOUR (U/SK)	1.50	DAY	B0-004	2,291.01		
	ALLOW 2.5% ON LABOUR FOR TOOLS				128.53		
	ALLOW FOR BARRICADING	1.00	ITEM	B0-704	48.20		
	ROAD MARKING PAINT(YELLOW) - @ RATE OF 6.5 SQ.M/LITRE	1.50	LTR	B0-547	1,540.18		
					6,857.92		
	COST PER 3.66 M				6,857.92		
	RATE PER 1 M			MS1-052	1,873.75		
				SAY	1,873.75	1,404.65	469.10
MS1-053	ERECTING, BARRICADING IN JUNGLE TIMBER 75 - 100 MM DIA. VERTICAL POSTS AT .9 M CENTRES AND 1.2 M ABOVE GROUND INCLUDING WHITE WASHING.[SSCM 1709]:						
	DATA FOR 3.66 LINEAR METRES						
	LABOUR U/SK	0.50	DAY	B0-004	763.67		
	ALLOW 2.5% ON LABOUR FOR TOOLS				19.09		
	TIMBER POST,HORIZ, ETC.	0.92	ITEM	B0-762	376.89		
	ALLOW FOR WHITE WASHING TIMBER	0.92	ITEM	B0-792	17.48		
					1,177.13		
	COST PER 3.66 M				1,177.13		
	RATE PER 1 M			MS1-053	321.62		
				SAY	321.60	208.65	112.95
MS1-054	TEMPORARY SCAFFOLDING FOR PAINTING OR TARRING BRIDGES AND FOR WEEDING ON BRIDGES OR RETAINING WALL INCLUDING DISMANTLING AFTER WORK.[SSCM 1008.3(a)]:						
	DATA FOR 93 SQ.M						
	LABOUR (S/SK)	6.00	DAYS	B0-003	9,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				240.00		
	ALLOW FOR COIR STRING (SCAFF.)	1.00	ITEM	B0-717	171.75		
	ALLOW FOR COIR ROPE	1.00	ITEM	B0-715	68.75		
	ALLOW FOR TIMBER PLANKS/BAMBOO	1.00	ITEM	B0-761	1,028.40		
					11,108.90		
	COST PER 93 SQ.M				11,108.90		
	RATE PER 1 SQ.MM			MS1-054	119.45		
				SAY	119.45	103.23	16.22

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-055	ROUGHNING EXISTING SMOOTH TARRED METALLED CARRIAGEWAY BY HAND FOR BONDING, COLLECTING DISPOSAL OF ALL LOOSE MATERIALS.[SSCM 403.3(b)]:						
	DATE FOR 93 SQ.M						
	LABOUR S/SK	1.00	DAY	B0-003	1,600.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				40.00		
					1,640.00		
	COST PER 93 SQ.M				1,640.00		
	RATE PER 1 SQ.M			MS1-055	17.63		
				SAY	17.65	17.20	0.45
MS1-056	SUPPLY OF DIESEL FOR MACHINERIES: (EX-FILLING STATION) DIESEL	1.00	LTR.	B0-612	104.00		
	RATE PER 1 LTR			MS1-056	104.00		
				SAY	104.00	0.00	104.00
MS1-057	PATCHING ROAD WITH PREMIX (LOOSE VOLUME) AFTER PREP. SURFACE WITH EMULSION(CSS-1) AT .75 LTR/SQ.M AS TACK COAT, INCLUDING INTERNAL TRANSPORT AND HAND STAMPING. (SUPPLY OF PREMIX(LOOSE VOL.) PAID SEPARATELY) [SSCM 1102.3(b)(i)]:						
	DATA FOR 2.83 CU.M(LOOSE VOLUME)						
	LABOUR (U/SK) - (PREP.SUR.)	0.50	DAY	B0-004	763.67		
	LABOUR (U/SK) - (MANUAL TRANS.)	3.00	DAYS	B0-004	4,582.02		
	LABOUR (S/SK) - (APPLYING EMULS.)	0.50	DAY	B0-003	800.00		
	LABOUR (S/SK) - (STAMPING PREMIX)	3.00	DAYS	B0-003	4,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				191.72		
	EMULSION(CSS-1) FOR TACK COAT	22.50	LTR	B0-352	2,100.38		
	TRACTOR & TRAILER	0.50	DAY	B0-117	3,216.49		
					16,454.27		
	COST PER 2.83 CU.M				16,454.27		
	RATE PER 1 CU.M			MS1-057	5,814.23		
				SAY	5,814.25	3,867.73	1,946.52

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-058	PATCHING ROAD WITH PREMIX AFTER PREPARING SURFACE WITH EMULSION(CSS-1) AT .75 LTR/SQ.M AS TACK COAT, INCLUDING INTERNAL TRANSPORT AND TAMPING WITH MACHINE.(SUPPLY OF PREMIX PAID SEPARATELY) [SSCM 1102.3(b)(i)]: DATA FOR 7.0 M.TONS ----- (ASSUMED 1 CU.M OF PREMIX(LOOSE) = 1.48 M.TONS) LABOUR (SK/A) - (CHARGE HAND) 1.00 DAY B0-001 1,900.00 LABOUR (S/SK) 3.00 DAYS B0-003 4,800.00 LABOUR (U/SK) 11.00 DAYS B0-004 16,800.74 ALLOW 2.5% ON LABOUR FOR TOOLS 587.52 EMULSION (CSS-1) 51.64 LTR B0-352 4,820.94 MACHINE TAMPER 1.00 DAY B0-108 3,999.94 LABOUR (SK/B) (TAMPER OPERATOR) 1.00 DAY B0-002 1,700.00 TRACTOR & TRAILER 1.00 DAY B0-117 6,432.98 ----- 41,042.12 COST PER 7 M.T 41,042.12 RATE PER 1 M.T MS1-058 5,863.16 =====						
				SAY	5,863.15	3,600.11	2,263.04
MS1-059	PAINTING TWO COATS ENAMEL PAINT ON KERBS, AFTER CLEANING AND PREPARING SURFACE. DATA FOR 9.29 SQ.M ----- PAINTER - SK'B' 0.82 DAY B0-002 1,394.00 LABOUR - U/SK FOR CLEANING 0.35 DAY B0-004 534.57 ALLOW 2.5% OF LABOUR FOR TOOLS 48.21 ENAMEL PAINT (.77+.55) 1.32 LTR B0-541 996.86 ----- 2,973.65 COST FOR 9.29 SQ.M 2,973.65 RATE PER 1 SQ.M MS1-059 320.09 =====						
				SAY	320.10	207.60	112.50
MS1-060	PREPARING AND STOCK PILING PREMIX AT SITE USING 12.5 MM AGGREGATE AND EMULSION CSS-1. (EXCLUDING TRANSPORT OF AGGREGATE): DATA FOR 2.83 CU.M ----- LABOUR - S/SK 1.00 DAY B0-003 1,600.00 LABOUR - U/SK 4.00 DAY B0-004 6,109.36 ALLOW 2.5% OF LABOUR FOR TOOLS 192.73 EMULSION CSS-1 250.00 LTR B0-352 23,337.50 WATER 137.00 LTR B0-788 171.25 AGGREGATE 12.5 MM 1.81 CU.M B0-309 5,249.00 SAND 1.22 CU.M B0-331 4,880.00 BASKET 0.67 NO. B0-631 174.20 ----- 41,714.04 COST FOR 2.83 CU.M 41,714.04 RATE PER 1 CU.M MS1-060 14,739.94 =====						
				SAY	14,739.95	2,724.16	12,015.79

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
MS1-061	BREAKING MANUALLY ASPHALT LAYER 2" - 3" THICK ON THE CARRIAGEWAY FOR KERB LAYING						
	DATA FOR LENGTH OF	12.00	METERS				
	LABOUR - U/SK FOR BREAKING ASPHALT	3.00	DAY	B0-003	4,800.00		
	LABOUR - SK'A' BLACK SMITH FOR SHARPENNING	0.13	DAY	B0-001	237.50		
	ALLOW 2.5% OF LABOUR FOR TOOLS				125.94		
					5,163.44		
	COST FOR 12 M LENGTH				5,163.44		
	RATE PER 1 METER			MS1-061	430.29		
				SAY	430.30	419.79	10.51

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HSR - 2021
Engineering Division
Ministry of Highways

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SECTION XIV							
SURVEYING, LEVELLING AND DAYWORKS							
SV1-001	SUPPLY OF UNSKILLED LABOUR:						
	LABOUR (U/SK)	1.00	DAY	B0-004	1,527.34		
	RATE PER 1 DAY			SV1-001	1,527.34		
				SAY	1,527.35	1,527.35	0.00
SV1-002	SUPPLY OF SEMISKILLED LABOUR:						
	LABOUR (S/SK)	1.00	DAY	B0-003	1,600.00		
	RATE PER 1 DAY			SV1-002	1,600.00		
				SAY	1,600.00	1,600.00	0.00
SV1-003	SUPPLY OF SKILLED 'A' GRADE LABOUR:						
	LABOUR (SK/A)	1.00	DAY	B0-001	1,900.00		
	RATE PER 1 DAY			SV1-003	1,900.00		
				SAY	1,900.00	1,900.00	0.00
SV1-004	SUPPLY OF SKILLED 'B' GRADE LABOUR:						
	LABOUR (SK/A)	1.00	DAY	B0-002	1,700.00		
	RATE PER 1 DAY			SV1-004	1,700.00		
				SAY	1,700.00	1,700.00	0.00
SV1-005	CLEARING JUNGLE (LIGHT) TO A WIDTH OF 1.22 METRES FOR SURVEY WORK:						
	DATA FOR 1.61 KILO METRES						
	LABOUR (U/SK)	6.00	DAYS	B0-004	9,164.04		
	ALLOW 2.5% ON LABOUR FOR TOOLS				229.10		
					9,393.14		
	TOTAL COST PER 1.61 KM				9,393.14		
	RATE PER 1 KILO METRE			SV1-005	5,834.25		
				SAY	5,834.25	5,691.95	142.30
SV1-006	CLEARING JUNGLE (MEDIUM) TO A WIDTH OF 1.22 METRES FOR SURVEY WORK:						
	DATA FOR 1.61 KILO METRES						
	LABOUR (U/SK)	8.00	DAYS	B0-004	12,218.72		
	ALLOW 2.5% ON LABOUR FOR TOOLS				305.47		
					12,524.19		
	TOTAL COST PER 1.61 KM				12,524.19		
	RATE PER 1 KILO METRE			SV1-006	7,779.00		
				SAY	7,779.00	7,589.27	189.73

HIGHWAY SCHEDULE OF RATES - ANALYSIS 2021
NORTHERN PROVINCE

CODE	DESCRIPTION OF ITEM	QUANTITY	UNIT	PRICE CODE	AMOUNT (Rs.)	LABOUR INPUT	OTHER INPUTS
SV1-007	CLEARING JUNGLE (HEAVY) TO A WIDTH OF 1.22 METRES FOR SURVEY WORK:						
	DATA FOR 1.61 KILO METRES						
	LABOUR (U/SK)	12.00	DAYS	B0-004	18,328.08		
	ALLOW 2.5% ON LABOUR FOR TOOLS				458.20		
					18,786.28		
	TOTAL COST PER 1.61 KM				18,786.28		
	RATE PER 1 KILO METRE			SV1-007	11,668.50		
				SAY	11,668.50	11,383.90	284.60
SV1-008	SUPPLY OF LABOUR FOR CHAINING AND CUTTING PEGS AND PEGGING:						
	DATA FOR 1.61 KILO METRES						
	LABOUR (S/SK)	1.50	DAYS	B0-003	2,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				60.00		
					2,460.00		
	TOTAL COST PER 1.61 KM				2,460.00		
	RATE PER 1 KILO METRE			SV1-008	1,527.95		
				SAY	1,527.95	1,490.68	37.27
SV1-009	LEVELLING CHAINING AND PEGGING AND ESTABLISHING BENCH MARKS ON CONCRETE ROCK OR PEGS AND CHECKING BACK LEVELS:						
	DATA FOR 1.61 KILO METRES						
	LABOUR (S/SK)	3.00	DAYS	B0-003	4,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				120.00		
					4,920.00		
	TOTAL COST PER 1.61 KM				4,920.00		
	RATE PER 1 KILO METRE			SV1-009	3,055.90		
				SAY	3,055.90	2,981.37	74.53
SV1-010	SURVEYING INCLUDING FIXING PICKETS & TAKING ANGLES:						
	DATA FOR 1.61 KILO METRES						
	LABOUR (S/SK)	3.00	DAYS	B0-003	4,800.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				120.00		
					4,920.00		
	TOTAL COST PER 1.61 KM				4,920.00		
	RATE PER 1 KILO METRE			SV1-010	3,055.90		
				SAY	3,055.90	2,981.37	74.53
SV1-011	CHANGING TRAVERSE LINES AND TAKING OFF-SETS:						
	DATA FOR 1.61 KILO METRES						
	LABOUR (S/SK)	4.00	DAYS	B0-003	6,400.00		
	ALLOW 2.5% ON LABOUR FOR TOOLS				160.00		
					6,560.00		
	TOTAL COST PER 1.61 KM				6,560.00		
	RATE PER 1 KILO METRE			SV1-011	4,074.53		
				SAY	4,074.55	3,975.16	99.39

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**EX-PLANT BASIC PRICES OF ASPHALT CONCRETE MATERIALS PRODUCED AT MIXING PLANTS
LOCATED IN THE PROVINCES : HSR-2021**

- NOTE:** 1. TRANSPORT COST OF ALL RAW MATERIALS AND ROYALTY INCLUDED IN THE GIVEN PRICES.
2. PRICES FROM THE ASPHALT CONCRETE MIXING PLANT CLOSEST TO THE WORK SITE, WHICH IS ABLE TO SUPPLY THE REQUIRED TYPE (HOT/COLD) SHALL BE CONSIDERED.
3. ADD PREMIX TRANSPORT FROM MIXING PLANT TO THE WORK SITE, SEPARATELY
4. BINDER % OF B0-361A, B0-362, B0-362A AND B0-365 ARE BY TOTAL MIX WEIGHT AND BINDER % OF B0-366 IS BY TOTAL WEIGHT OF AGGREGATE

PRICE : EX-PLANT COST RS. PER M.Ton																
PROVINCE			WESTERN		SOUTHERN		CENTRAL		NORTH CENTRAL		NORTH WESTERN		UVA		SABARAGAMUWA	
LOCATION																
CODE	AGG. SIZE	UNIT	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE	% BINDER	PRICE
B0-361	19 mm	PER M.T.	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL	-	NIL
B0-361A	19 mm	PER M.T.	4.70	9,865.00	4.70	10,154.00	4.70	10,030.00	4.60	10,244.00	4.70	10,132.00	4.70	10,411.00	4.70	9,817.00
B0-362	37.5 mm	PER M.T.	3.50	8,602.00	3.50	8,784.00	-	NIL	3.50	8,875.00	-	NIL	-	NIL	-	NIL
B0-362A	19 mm	PER M.T.	4.10	9,380.00	4.10	9,600.00	4.10	9,527.00	4.10	9,619.00	4.10	9,480.00	4.10	9,657.00	4.10	9,331.00
B0-365 *	19 mm	PER M.T.	5.50	10,993.00	5.50	11,245.00	-	NIL	5.50	11,327.00	-	NIL	-	NIL	-	NIL
B0-365A**	19 mm	PER M.T.	5.50	10,977.00	5.50	11,272.00	-	NIL	5.50	11,241.00	-	NIL	-	NIL	-	NIL
B0-366***	19 mm	PER M.T.	-	-	-	-	6.67	8,949.00	6.67	9,728.00	-	NIL	6.67	9,081.00	-	NIL

* Binder for B0-365 is 15% cut-back with Bitumen 60/70 penetration grade; 19mm Aggregate

** Binder for B0-365A is 16% cut-back with Bitumen 60/70 penetration grade; 12.5 Aggregate

*** Binder for B0-366 is Emulsion CSS-1

ROAD DEVELOPMENT AUTHORITY
SCHEDULE OF HIRE CHARGES FOR MACHINERY AND EQUIPMENT-2021
WITH EFFECT FROM 01ST JANUARY 2021

K=70.00 P=137.00 D=104.00
 Mechanical Division RDA 2021

BASIC RATE No Profit & Overhead

1 M/CYCLES,CARS, JEEPS & DOUBLE CABS, PASSENGER VAN, BUS

HSR CODE	DESCRIPTION	PLANT CAPACITY	HIRE Per KM Rs.		Hire Per KM Without Driver Cost Rs		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
			DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-195A	Car	2000 & above Diesel	29.29	49.39	22.61		24.41	38.06		
BO-195B	Car	Below 2000, Diesel	23.08	34.78	16.41		19.52	31.22		
BO-195C	Car	1500 & above Petrol mfd before 2006	20.77	39.61	14.10		17.77	36.61		
BO-195D	Car	1500 & above Petrol mfd after 2006	36.60	55.43	29.92		29.47	48.31		
BO-195E	Car	1500 & above Petrol mfd after 2014	52.42	71.26	45.75		41.17	60.01		
BO-195F	Car	Below 1500 Petrol	16.87	31.94	10.19		14.62	29.69		
BO-195G	Car STDP	1500cc Subaru	65.70	84.54	59.03		50.99	69.83		
BO-195H	Jeep	Mitsubishi J44,J36	19.03	34.63	12.35		17.53	33.13		
BO-195I	Jeep	Pajero, Troupier	23.96	41.78	17.28		21.71	39.53		
BO-195J	Jeep	Pajero 4M40 65 Sri	65.65	83.48	58.98		57.03	74.86		
BO-195K	Jeep	Land Cruiser mfd 2014 and above	215.11	240.07	208.44		183.23	208.19		
BO-195L	Jeep	Land Cruiser mfd 2010	135.67	160.63	129.00		116.28	141.24		
BO-195M	Mounted	Nissan X Trail mfd 2010	76.87	101.83	70.20		65.62	90.58		
BO-195N	Jeep STDP	Nissan Petrol mfd 2014 and above	104.50	129.46	97.82		102.81	127.77		
BO-149	Pickup Truck	Single Cab 2WD	29.31	42.62	22.19		26.31	39.62		
BO-149A	Pickup Truck	Double Cab, 4WD above 2005 and above	38.22	51.53	31.10		33.82	47.13		
BO-149B	Pickup Truck	Double Cab, 2WD above 2005 and above	264.31	275.89	257.19		224.31	235.89		
BO-149C	Pickup Truck	Double Cab, 4WD above 250-	24.36	37.67	17.24		21.96	35.27		
BO-149D	Pickup Truck	Double Cab, 2WD above 250-	21.62	33.19	14.50		19.62	31.19		
BO-149E	Pickup Truck	Double Cab, 4WD mfd 2010	73.46	85.04	66.35		63.46	75.04		
BO-149F	Pickup Truck	Double Cab, 4WD mfd after 2015	92.55	104.13	85.43		79.55	91.13		
BO-195R	Motor Cycle	125 CC	1.31	4.70	1.31		1.10	4.49		
BO-195S	Motor Cycle STDP	892 CC	41.34	44.73	41.34		30.92	34.31		
BO-195O	Passenger Van	6 to 9 seater	57.70	72.00	51.02		50.20	64.50		
BO-195P	Passenger Van	above 10 seat	66.81	84.36	60.14		57.44	74.99		
BO-195Q	Bus	30 seater A/C	78.77	97.68			67.77	86.68		

ANNEX-1

ROAD DEVELOPMENT AUTHORITY
SCHEDULE OF HIRE CHARGES FOR MACHINERY AND EQUIPMENT-2021
WITH EFFECT FROM 01ST JANUARY 2021

K=70.00 P=137.00 D=104.00
 Mechanical Division RDA 2021

BASIC RATE
2
No Profit & Overhead
TRUCKS AND BOWSERS

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-119B	Tipper Truck	10 Ton	72.28	108.89	1,807.01	2,722.21	64.58	101.19	1,614.51	2,529.71
BO-119C	Tipper Truck	7 Ton, Old TATA	42.22	71.02	1,097.62	1,846.42	38.72	67.52	1,006.62	1,755.42
BO-119D	Tipper Truck	7 Ton, Isuzu	61.15	89.95	1,590.03	2,338.83	54.69	83.49	1,422.03	2,170.83
BO-119E	Tipper Truck	5 Ton	41.91	65.08	1,173.35	1,822.31	40.96	65.92	1,064.85	1,713.81
BO-119F	Tipper Truck	3 ton	35.25	54.45	1,057.38	1,633.38	32.10	51.30	962.88	1,538.88
BO-151A	Lorry	17 Ton	108.07	152.00	2,701.72	3,799.96	93.67	137.60	2,341.72	3,439.96
BO-151	Lorry (Boom Truck)	17 Ton- Self Loading/ wi10 t Crane	135.23	179.16	3,380.79	4,479.03	117.79	161.72	2,944.79	4,043.03
BO-151B	Lorry	12 Ton	73.38	109.99	1,834.51	2,749.71	64.58	101.19	1,614.51	2,529.71
BO-151C	Lorry	10 T /5T crane Self load	180.46	220.40	4,511.60	5,510.00	154.86	194.80	3,871.60	4,870.00
BO-151D	Lorry	10 Ton with 5 Ton Crane	129.21	169.14	3,230.20	4,228.60	112.57	152.50	2,814.20	3,812.60
BO-148	Lorry	10 Ton	65.11	101.62	1,627.71	2,540.53	57.75	94.26	1,443.71	2,356.53
BO-151E	Lorry	7 Ton with 3 Ton Crane	69.58	96.32	1,948.14	2,696.94	61.58	88.32	1,724.14	2,472.94
BO-127	Lorry	7 Ton	37.60	64.34	1,052.86	1,801.66	34.60	61.34	968.86	1,717.66
BO-126	Lorry	5 Ton	33.34	55.53	1,000.32	1,665.92	30.66	52.85	919.82	1,585.42
BO-125	Lorry	3 Ton	28.68	44.28	917.63	1,416.83	26.27	41.87	840.63	1,339.83
BO-118B	Cargo Truck Chinese	10T Truck with 5T crane	310.23	350.16	7,755.70	8,754.10	269.67	309.60	6,741.70	7,740.10
BO-118C	Crew Cabs	2771 cc mfd after 2007	59.94	75.54	1,918.12	2,417.32	52.65	68.25	1,684.67	2,183.87
BO-119L	Dump Truck	30 T, Quarry	448.38	531.58	8,967.68	10,631.68	383.13	466.33	7,662.68	9,326.68
BO-118D	Wrecker Truck	5 ton	50.70	89.70	1,267.50	2,242.50	47.12	86.12	1,178.10	2,153.10
BO-118E	Complex	Portable Office/gen set	4.93	7.79	98.65	155.85	3.22	6.08	64.45	121.65
BO-118F	Truck	Mobile Workshop	77.81	120.85	2,256.59	3,504.59	71.19	114.23	2,064.56	3,312.56
BO-118G	Truck	Lube Service 4X4	60.65	101.00	1,758.86	2,928.86	54.36	94.70	1,576.30	2,746.30
BO-118H	Truck	Explosive Transporter	43.44	79.09	1,303.07	2,372.78	36.40	72.06	1,091.95	2,161.66
BO-159	Truck (Sky Lift)	Snooper 750 Kg	71.01	98.47	1,775.31	2,461.71	61.11	88.57	1,527.81	2,214.21
BO-130E	Diesel Bowser	9000-10,000 Lit Capacity	93.37	129.03	2,801.17	3,870.88	83.34	119.00	2,500.17	3,569.88
BO-130D	Diesel Bowser	6000 Litre Capacity	60.42	91.62	1,812.65	2,748.65	55.29	86.49	1,658.65	2,594.65
BO-130C	Diesel Bowser Chinese	6000 Litre Capacity	240.58	271.78	7,217.44	8,153.44	211.38	242.58	6,341.44	7,277.44
BO-130B	Bowser only	Water / Fuel	1.28	1.28	25.61	25.61	0.78	0.78	15.53	15.53
BO-153A	Bowser only	Emulsion	1.86	1.86	33.51	33.51	1.04	1.04	18.72	18.72
BO-130	Bowser	With out Primemover	16.11	16.11	322.28	322.28	13.34	13.34	266.83	266.83
BO-130A	Bowser	With old Primemover	136.61	190.98	2,301.23	3,497.23	126.51	180.87	2,084.53	3,280.53
BO-141	Bowser	Bitumen - 10,000 ltr	104.23	163.66	2,918.45	4,582.45	92.28	151.71	2,583.89	4,247.89
BO-141A	Bitumen Bowser CHIN	Bitumen - 10,000 Ltr	334.39	366.01	8,688.14	10,248.14	256.29	312.01	7,176.14	8,736.14
BO-153	Bowser	Emulsion - 8,000 ltr	88.02	138.23	2,552.66	4,008.66	77.19	127.40	2,238.50	3,694.50
BO-128A	Water Bowser	9000-10,000 Lit Capacity	38.43	51.67	1,153.00	1,550.00	90.39	126.05	2,711.64	3,781.35
BO-128	Water Bowser	6000 Litre Capacity	34.47	40.63	1,103.00	1,300.00	54.55	85.75	1,745.74	2,744.14

ANNEX-1

ROAD DEVELOPMENT AUTHORITY
SCHEDULE OF HIRE CHARGES FOR MACHINERY AND EQUIPMENT-2021
WITH EFFECT FROM 01ST JANUARY 2021

K=70.00 P=137.00 D=104.00
 Mechanical Division RDA 2021

BASIC RATE
3

No Profit & Overhead
LORRIES, TIPPERS, DUMP TRUCKS
When Used for Transport of Materials
Hire Charge Loaded Inclusive of Return trip

Use This Table Only for The Transport of Materials

HSR CODE	PLANT		HIRE Per KM (inclusive return) Rs.		Hire / KM / Cu. M inclusive return Rs		HIRE Per KM (inclusive return) Without Repl. Cost. Rs		HIRE/KM/Cu.M (inclusive return) Without Repl. Cost. Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-119G	Tipper Truck	10 Ton	126.49	191.78	16.87	25.57	113.01	178.31	15.07	23.77
BO-119H	Tipper Truck	7 Ton, Old TATA	73.80	125.17	16.40	27.82	67.67	119.04	15.04	26.45
BO-119I	Tipper Truck	7 Ton , Isuzu	106.94	158.31	23.76	35.18	99.46	152.88	22.10	33.97
BO-119J	Tipper Truck	5 Ton	73.22	114.56	20.92	32.73	66.44	107.78	18.98	30.79
BO-119K	Tipper Truck	3 Ton	61.54	95.79	24.62	38.31	56.03	90.27	22.41	36.11
BO-151F	Lorry	17 Ton	205.86	284.22	16.47	22.74	180.66	259.02	14.45	20.72
BO-151G	Lorry	12 Ton	128.41	193.71	14.27	21.52	113.01	178.31	12.56	19.81
BO-151H	Lorry	10 Ton	112.46	173.52	14.99	23.14	99.58	160.64	13.28	21.42
BO-151I	Lorry	7 Ton	65.73	113.43	14.61	25.21	60.48	108.18	13.44	24.04
BO-151J	Lorry	5 Ton	58.25	97.82	16.64	27.95	53.55	93.13	15.30	26.61
BO-151K	Lorry	3 Ton	50.02	77.85	20.01	31.14	45.81	73.64	18.32	29.45
BO-119M	Dump Truck	30 T, Quarry	813.58	961.98	50.85	60.12	699.40	847.80	43.71	52.99

4 **COMPACTION EQUIPMENT**

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY			DRY	WET	DRY	WET	DRY	WET
BO-111B	Smooth Roller	3 Ton Static			546.20	806.20			523.70	783.70
BO-111C	Smooth Roller Chinese	3 - 5Ton Vibrating			3,369.76	3,629.76			2,999.76	3,259.76
BO-111	Smooth Roller	8-10 Ton Static			1,059.48	1,579.48			987.06	1,507.06
BO-111A	Smooth Roller Chinese	8-10 Ton Static Double Drum			2,526.47	3,067.27			2,230.67	2,771.47
BO-109	Vib Roller	600-900 Kg Pedestal			704.87	877.09			583.69	755.91
BO-109A	Vib Roller Chinese	650 Kg			866.38	1,063.98			710.13	907.73
BO-109B	Vib Roller	2.5-4 Ton Tandem			993.10	1,325.07			866.25	1,198.22
BO-109C	Vib Roller Chinese	3 Ton Tandem			3,102.84	3,466.84			2,570.60	2,934.60
BO-135	Vib Roller	6-7 ton Tandem			1,755.30	2,691.30			1,524.66	2,460.66
BO-135A	Vib Roller	6 Ton With Edgecutter			2,439.50	3,387.98			2,064.71	3,013.19
BO-110	Vib Roller	10 Ton Smooth			2,732.88	4,230.48			2,402.54	3,900.14
BO-110A	Vib Roller Chinese	10 Ton Twin Drum Smooth			10,538.85	12,098.85			8,992.69	10,552.69
BO-110B	Vib Roller	10 Ton Pad Foot			2,935.00	4,432.60			2,597.55	4,095.15
BO-112	Pneu Roller	8-10 Ton, Pneumatic trd			3,469.33	4,742.29			3,231.73	4,504.69
BO-112A	Pneu. Roller Chinese	8-10 Ton, Pneumatic trd			11,751.51	13,311.51			11,145.51	12,705.51
BO-112B	Pad Foot	Sheep Foot Rollers			148.88	148.88			106.38	106.38
BO-108	Rammers	60 Kg			281.48	499.99			253.94	472.45
BO-107	Plate comp	90 Kg Tamper Plates			350.00	549.68			322.19	521.87
BO-106 Av	Porker Petrol	With Vibrators			185.94	249.24			162.24	225.54
BO-106 Av	Porker Diesel	With Vibrators			224.36	330.44			201.58	307.66

ANNEX-1

ROAD DEVELOPMENT AUTHORITY
SCHEDULE OF HIRE CHARGES FOR MACHINERY AND EQUIPMENT-2021
WITH EFFECT FROM 01ST JANUARY 2021

K=70.00 P=137.00 D=104.00
 Mechanical Division RDA 2021

BASIC RATE **No Profit & Overhead**
5 **PRIME MOVERS, TRACTORS, LOW BED TRAILERS ETC.**

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-131	Prime Mover	Old	120.50	174.86	2,650.95	3,846.95	113.17	167.53	2,489.70	3,685.70
BO-131A	Prime Mover	New for 30 T Trailer	226.31	280.68	4,978.88	6,174.88	209.10	263.47	4,600.27	5,796.27
BO-131B	Prime Mover Chinese	40 Ton	416.33	470.70	9,159.37	10,355.37	383.61	437.97	8,439.37	9,635.37
BO-117A	Farm Tractor	Prime Mover only	27.10	45.59	487.80	820.60	26.17	44.66	471.08	803.88
BO-117B	Farm Tractor	Prime Mover only	25.08	43.57	451.38	784.18	24.45	42.94	440.08	772.88
BO-117	Farm Tractor	with 3 T Trailer	28.30	46.79	471.32	804.12	27.19	45.68	450.50	783.30
BO-150	Farm Tractor	with Fuel/water Bowser	26.36	44.85	471.65	804.45	25.23	43.71	450.27	783.07
BO-152	Farm Tractor	with Emulsion Bowser	26.94	45.43	482.35	815.15	25.49	43.98	456.27	789.07
BO-122	Farm Tractor	with Broom	61.79	80.28	1,141.12	1,473.92	51.80	70.29	942.61	1,275.41
BO-117C	Ind. Tractor	With Broom & Sprayer	65.95	88.61	1,187.02	1,595.02	61.45	84.11	1,106.02	1,514.02
BO-117D	Farm Tractor Chinese	Small Tractor & Broom	49.29	61.42	887.14	1,105.54	43.45	55.59	782.14	1,000.54
BO-130B	LowBedTrailer	20 Ton	42.95	42.95	859.06	859.06	39.37	39.37	787.42	787.42
BO-130A	LowBedTrailer	30 Ton	59.97	59.97	1,199.44	1,199.44	55.77	55.77	1,115.34	1,115.34
BO-130C	LowBedTrailer	50 Ton	65.19	65.19	1,303.86	1,303.86	60.52	60.52	1,210.41	1,210.41
BO-130D	LowBedTrailer	Rear Stearing- 30 ton	153.57	153.57	3,071.48	3,071.48	140.02	140.02	2,800.48	2,800.48
BO-130E	LowBedTrailer	40 T local mfd 2010	192.94	192.99	3,858.88	3,859.88	175.87	175.92	3,517.41	3,518.41
BO-130F	LowBedTrailer Chin.	50 Ton LB	252.73	252.73	5,054.69	5,054.69	230.31	230.31	4,606.13	4,606.13
BO-130G	HighBedTrailer	25 Ton	46.30	46.30	926.05	926.05	43.03	43.03	860.64	860.64
BO-130H	Trailer	3.5 Ton Tractor	3.22	3.22	64.44	64.44	2.75	2.75	54.92	54.92
BO-130I	Dump Trailer	30 Ton	313.58	389.22	6,898.78	8,562.78	288.01	363.65	6,336.28	8,000.28
BO-196F	Broom	Attachment only	36.71	36.71	734.23	734.23	27.35	27.35	547.02	547.02
BO-102A	Fuel Tank	Storage 5,000 ltr			63.45	63.45			55.74	55.74

ANNEX-1

ROAD DEVELOPMENT AUTHORITY
SCHEDULE OF HIRE CHARGES FOR MACHINERY AND EQUIPMENT-2021
WITH EFFECT FROM 01ST JANUARY 2021

K=70.00 P=137.00 D=104.00
 Mechanical Division RDA 2021

BASIC RATE
6
No Profit & Overhead
EARTH MOVING EQUIPMENT

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-115A	Loader	2 WD Backhoe			2,179.60	3,178.00			1,976.28	2,974.68
BO-115	Loader	4WD Backhoe			2,127.45	3,125.85			1,929.45	2,927.85
BO-115B	Loader Chinese	4WD Backhoe			10,548.92	11,547.32			9,244.28	10,242.68
BO-115C	Loader	4WD Ext. Arm Backhoe			2,486.47	3,484.87			2,233.84	3,232.24
BO-115D	Loader	Wheel 1.2 Cu.m			2,399.90	3,398.30			2,187.01	3,185.41
BO-116	Loader	Wheel 1.4			2,052.86	3,176.06			1,892.32	3,015.52
BO-116A	Loader	Wheel 1.7 Cu.m			2,383.90	3,881.50			2,202.42	3,700.02
BO-116B	Loader Chinese	Wheel 1.7 Cu.m			6,211.18	7,708.78			5,574.18	7,071.78
BO-124A	Loader	Wheel 2.0-2.3 Cu.m			2,752.83	4,549.95			2,525.43	4,322.55
BO-124	Loader	Wheel 2.7-3.1 Cu.m			3,226.14	5,098.14			2,957.41	4,829.41
BO-124A	Loader Chinese	Wheel 2.7-3.1 Cu.m			9,687.24	11,559.24			8,647.24	10,519.24
BO-124B	Loader	Wheel 2.7 Cu.m Rock bkt			5,190.20	7,062.20			4,666.70	6,538.70
BO-124C	Skid Loader Chinese	With out broom attachment			2,790.82	4,038.82			2,510.82	3,758.82
BO-124D	SkidLoaderBroom Chine	with broom attachment			2,927.89	4,175.89			2,627.89	3,875.89
BO-124E	Loader	Wheel 1.2 with Broom			2,948.47	4,196.47			2,651.31	3,899.31
BO-113	Moter Grader	65 HP			2,275.82	3,274.22			2,110.82	3,109.22
BO-114	Moter Grader	120-140 HP			3,020.04	5,478.60			2,846.04	5,304.60
BO-114A	Moter Grader Chinese	160 HP			18,025.70	20,484.26			16,219.70	18,678.26
BO-154	Tractor	Crawler, 80-100 HP			3,060.29	4,770.05			2,712.29	4,422.05
BO-154A	Tractor Chinese	Crawler, 80-100 HP YTO			5,865.48	7,575.24			5,024.28	6,734.04
BO-154B	Tractor	Crawler, 180-200 HP			5,641.56	8,536.92			4,934.16	7,829.52
BO-154C	Tractor	Crawler, above 300 HP			7,694.32	12,024.88			6,740.32	11,070.88
BO-155A	Excavator	Crawler with Breaker			5,003.85	7,512.33			4,383.85	6,892.33
BO-155B	Excavator Chinese	Crawler with Breaker			23,292.86	25,801.34			19,188.86	21,697.34
BO-155C	Excavator	Crawler with Bucket			4,512.53	6,933.65			3,885.33	6,306.45
BO-155	Excavator	Mobile/ 0.4 Cum			5,729.45	7,289.45	358.67	470.10	5,021.45	6,581.45
BO-155D	Excavator	Crawler/ 0.46CuM			4,051.59	5,486.79			3,427.59	4,862.79
BO-155E	Excavator Chinese	Crawler130 KW Longarm			14,705.50	16,140.70			11,697.50	13,132.70

7
CRUSHERS, AIR COMPRESSORS, DRILLS, GRINDERS, WELDING PLANT ETC.

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-156G	Granulator	8- 10 T/H			875.41	1,474.45			862.21	1,461.25
BO-156A	Compressor	Air, 125 CFM			975.38	1,786.58			936.38	1,747.58
BO-156B	Compressor	Air, 175 CFM			1,183.93	2,207.29			1,128.68	2,152.04
BO-156	Compressor	Air, 250 CFM			1,439.33	2,662.37			1,363.43	2,586.47
BO-156C	Compressor Chinese	Air, 250 CFM			2,668.68	3,891.72			2,493.68	3,716.72
BO-156D	Compressor	Air, 300-360 CFM			2,231.62	3,916.42			2,077.62	3,762.42
BO-156E	Compressor	Air, 600 CFM			2,971.48	5,467.48			2,757.73	5,253.73
BO-156F	Compressor Chinese	Air, 600 CFM			7,778.11	10,274.11			6,966.11	9,462.11
BO-144	Compressor	Air, 750 CFM			3,690.01	6,872.41			3,424.01	6,606.41
BO-143	Track Drill	Crawler			1,847.13	1,847.13			1,547.13	1,547.13
BO-158	Rock Drill	Hand Held			294.17	294.17			275.17	275.17
BO-105	Welding Plant	Engine Driven			1,120.96	1,894.72			1,074.16	1,847.92
BO-105A	Welding Plant Chinese	Engine Driven			2,322.64	3,096.40			2,162.64	2,936.40
BO-105B	Transformer	Welding, Air Cooled			1,141.46	2,919.86			1,124.46	2,902.86
BO-105C	Transformer	Welding, Oil Bath			987.47	2,499.11			981.47	2,493.11
BO-105D	Grinder	Intergral Bit			69.86	69.86			24.36	24.36
BO-105E	Grinder	Cross Bit			41.34	41.34			14.74	14.74
BO-105F	Exploder	Exploding Machine			66.69	66.69			23.29	23.29
BO-105G	Tester	Continuety			13.44	13.44			9.04	9.04
BO-105H	Loader	ANFO			597.30	597.30			559.30	559.30
BO-105I	Magazine	Explosive			53.16	53.16			46.28	46.28

ANNEX-1

ROAD DEVELOPMENT AUTHORITY
SCHEDULE OF HIRE CHARGES FOR MACHINERY AND EQUIPMENT-2021
WITH EFFECT FROM 01ST JANUARY 2021

K=70.00 P=137.00 D=104.00
 Mechanical Division RDA 2021

8 BASIC RATE No Profit & Overhead WATER PUMPS

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-133A	Pump	Clear Water 2 inch			99.01	274.01			78.91	253.91
BO-133B	Pump	Clear Water 3 inch			200.60	668.60			170.45	638.45
BO-133	Pump	Clear Water 4 inch			515.58	1,191.58			470.02	1,146.02
BO-133C	Pump	Clear Water 6 inch			801.33	1,711.33			720.93	1,630.93
BO-133D	Pump	Sludge 3inch			697.50	1,238.30			607.05	1,147.85
BO-134	Pump	Sludge 4 inch			841.36	1,600.56			730.81	1,490.01
BO-134E	Pump	Sludge 6 inch			983.57	1,888.37			812.05	1,716.85

9 TESTING EQUIPMENT

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-157A	Hammer	Sheet pile			162.72	162.72			106.47	106.47
BO-157B	Extractor	Sheet pile			132.99	132.99			88.99	88.99
BO-157C	Hammer	Vibro - Electric			4,304.27	4,304.27			3,604.27	3,604.27
BO-157D	Hammer	Pneumatic			2,229.75	2,229.75			1,869.75	1,869.75
BO-157	Demolisher	Pneumatic			77.66	77.66			57.90	(19.76)
BO-157E	Equipment	Sand Blasting			99.32	99.32			51.22	51.22
BO-157F	Hammer	Pneumatic chipping			47.33	47.33			39.77	39.77
BO-157G	Machine	Shot Creating/Dry Spray			1,369.15	1,369.15			1,180.65	1,180.65
BO-157H	Machine	Metal Cleaning/Spraying			940.23	940.23			760.23	760.23

10 ROAD CONSTRUCTION MACHINES

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-132	Baby Dumper	0.75 Cub			663.13	1,287.13			631.93	1,255.93
BO-140	Distributor	Bitumen 750 Ltr			915.07	1,701.31			872.82	1,659.96
BO-137	Trolley	Emulsion			115.05	115.05			89.97	89.97
BO-138	Sprayer	Emulsion			538.54	912.94			470.16	844.56
BO-138A	Sprayer Hand Cart Chine	Emulsion			544.96	919.36			470.16	844.56
BO-129A	Asphalt Paver	Wheel			6,848.49	8,692.41			6,154.74	7,998.66
BO-129	Asphalt Paver	Crawler			5,753.77	7,903.97			4,973.77	7,123.97
BO-129A	Asphalt Paver Chinese	Wheel			11,383.18	13,227.10			10,357.41	12,201.33
BO-129B	Asphalt Paver Chinese	Crawler			9,231.46	11,381.66			8,014.73	10,164.93
BO-121	Chip-spreder	Propelled			3,290.31	4,875.27			3,092.31	4,677.27
BO-121B	Chip-spreder	Propelled			5,272.10	7,148.26			4,733.10	6,609.26
BO-121A	Chip-spreder (Towed)	2.5 m width			317.05	317.05			277.68	277.68
BO-121C	Tar Kettle	Towed			74.80	74.80			38.55	38.55
BO-139	Road-Marker	Hand-Cart,, Gas/Heater			1,121.86	1,628.46			911.86	1,418.46
BO-139A	Road-Marker	MFD2011			872.06	1,378.66			744.56	1,251.16
BO-139B	Chip Sealer Chinese	Dagon	523.78	552.32	33,522.03	36,070.03	477.81	507.27	30,579.72	33,127.72
BO-145	Slurry Sealing	Machine Weisig 50M	177.70	206.64	11,373.07	13,494.67	152.51	181.95	9,760.57	11,882.17
BO-123A	Distributor/ Sprayer	Hot Bitumen 4500 ltr	113.86	149.61	4,012.58	4,870.58	97.40	133.15	3,617.64	4,475.64
BO-123B	Sprayer Chinese	Hot Bitumen 6000L	502.98	535.48	17,348.96	18,128.96	415.48	447.98	15,248.96	16,028.96
BO-123	Sprayer	Emulsion- 4000 ltr	65.72	90.24	2,655.99	3,342.39	53.33	77.84	2,308.99	2,995.39
BO-123C	Road milling machine	Wirtgen W2000	650.39	724.97	41,624.98	47,344.98	578.27	654.30	37,009.59	42,729.59
BO-123D	Road sweeper	Johnston VT500	641.41	693.41	19,242.40	20,802.40	634.49	686.49	19,034.71	20,594.71

ANNEX-1

ROAD DEVELOPMENT AUTHORITY
SCHEDULE OF HIRE CHARGES FOR MACHINERY AND EQUIPMENT-2021
WITH EFFECT FROM 01ST JANUARY 2021

K=70.00 P=137.00 D=104.00
 Mechanical Division RDA 2021

BASIC RATE
11 No Profit & Overhead
ELECTRIC GENERATORS

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-196	Generator	Electric 7 - 10 KVA			316.59	940.59			299.04	923.04
BO-196A	Generator	Electric 10 KVA			464.87	1,263.59			430.37	1,229.09
BO-196B	Generator	Electric 50 KVA			912.25	2,004.25			863.50	1,955.50
BO-196C	Generator Chinese	Electric 420 KW			5,204.56	11,444.56			4,731.02	10,971.02
BO-196D	Lighting Set	Flood Trolley mtd. 9 KVA			1,099.31	2,160.11			1,020.21	2,081.01

12 CRANES, FORK LIFT

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-146D	Crane	Crawler , 25 Ton			3,843.55	5,253.79			3,333.55	4,743.79
BO-146E	Crane	Crawler , 35 Ton			4,526.23	6,086.23			3,896.23	5,456.23
BO-146F	Drag line	Crawler , 35 T Crane Modified			6,517.80	8,327.40			5,527.80	7,337.40
BO-146G	Crane	Crawler , 45 Ton			8,185.58	11,355.50			6,805.58	9,975.50
BO-146	Crane	Mobile, 25 Ton	279.30	389.92	6,144.69	8,578.29	246.58	357.19	5,424.69	7,858.29
BO-146B	Crane Hydraulic Chin.	Mobile 50 Ton	1,321.18	1,506.07	23,781.26	27,109.26	1,172.46	1,357.35	21,104.33	24,432.33
BO-146A	Crane	Mobile 30 Ton	454.86	603.92	8,187.45	10,870.65	398.19	547.26	7,167.45	9,850.65
BO-146C	Crane	Mobile, 45 Ton	1,043.40	1,257.90	16,694.40	20,126.40	915.90	1,130.40	14,654.40	18,086.40
BO-146H	Fork Lift	Truck, 5 Ton	87.08	138.47	1,480.41	2,354.01	75.32	126.71	1,280.41	2,154.01
BO-146I	Fork Lift	Truck, 3 Ton	51.18	77.46	972.46	1,471.66	45.08	71.35	856.46	1,355.66

13 FERRY BOATS & PASSENGER LAUNCHES

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-197	Launch	200 Passenger, wooden			4,332.25	6,753.37			3,420.25	5,841.37
BO-197A	Launch	200 Passenger, steel			8,180.85	10,502.13			6,200.85	8,522.13
BO-197B	Launch	100 Passenger, steel (Vadatharakai)			26,845.24	29,166.52			19,195.24	21,516.52
BO-197C	Ferry c/w OBM	10 Ton			1,982.72	2,931.92			1,706.72	2,655.92
BO-197D	Ferry with IBM	85 Ton			91,243.87	95,611.87			70,093.87	74,461.87

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ROAD DEVELOPMENT AUTHORITY
SCHEDULE OF HIRE CHARGES FOR MACHINERY AND EQUIPMENT-2021
WITH EFFECT FROM 01ST JANUARY 2021

K=70.00 P=137.00 D=104.00
 Mechanical Division RDA 2021

BASIC RATE **No Profit & Overhead**
14 **CONCRETING EQUIPMENT & PRODUCTION PLANT**

HSR CODE	PLANT		HIRE Per KM Rs.		HIRE Per Hour Rs.		Hire Per KM Without Repl. Cost Rs		Hire Per Hour Without Repl. Cost Rs	
	DESCRIPTION	CAPACITY	DRY	WET	DRY	WET	DRY	WET	DRY	WET
BO-102A	ConcreteMixer	200 Ltr (10/7)			430.90	780.34			403.90	753.34
BO-102	ConcreteMixer	400 Ltr (14/10)			495.22	919.54			454.42	878.74
BO-102A	ConcreteMixer	14/10 Self Loading			621.21	1,120.41			558.21	1,057.41
BO-136	ConcreteMixer	14/10 S/L, weigh Batching			1,018.51	1,542.67			924.71	1,448.87
BO-136A	Vibrator Exter	Electric External			166.44	586.02			158.60	578.18
BO-196E	Generator	Frequency for vibrator			337.09	1,106.32			317.89	1,087.12
BO-196G	Converter	Frequency			466.42	1,403.48			433.42	1,370.48
BO-147E	Asphalt Plant	Portable 14/10,21/14			496.20	957.96			452.40	914.16
BO-147	Asphalt Plant	Hot , Complex 60 TPH			13,247.07	17,615.07			8,352.07	12,720.07
BO-147B	Asphalt Plant Chinese	Hot , Complex 60 TPH			15,143.43	19,407.43			10,066.51	14,330.51
BO-147C	Asphalt Plant Chinese	Hot , Complex 80/100 TPH			25,070.01	29,334.01			16,783.09	21,047.09
BO-147D	Cold Mix Plant	Complex 15 TPH			4,736.19	6,670.59			3,691.19	5,625.59
BO-147A	Cold Mix Plant	Complex 30 TPH			7,955.26	10,513.66			5,615.26	8,173.66
BO-147F	Emulsion Plant	Complex 10 tph			15,840.81	17,400.81			11,340.81	12,900.81
BO-147G	Emulsion Plant	Complex 5thp			7,544.95	8,605.75			5,444.95	6,505.75
BO-147H	Decanting Plant Chin.	DT6			8,485.91	9,161.91			7,216.68	7,892.68
BO-147I	Decanting Plant Chin.	DT8			10,282.08	10,958.08			8,670.74	9,346.74
BO-147J	Boring	Deep Foundation			3,977.68	4,664.08			3,347.68	4,034.08
BO-147K	Boring	Shallow Foundation			2,616.19	3,302.59			2,304.19	2,990.59
BO-142A	Crusher	Stone 200 T/H Complex			49,740.93	54,108.93			46,996.93	51,364.93
BO-142B	Crusher	Stone 100 T/H Complex			14,104.62	16,600.62			13,564.62	16,060.62
BO-142C	Crusher Chinese	Stone 100 T/H Complex			52,741.27	55,237.27			48,675.46	51,171.46
BO-142D	Crusher	Stone50-75T/H Complex			12,792.75	15,039.15			12,312.75	14,559.15
BO-142	Crusher	Stone 40 T/H Complex			9,663.68	11,785.28			9,313.68	11,435.28
BO-142E	Crusher	Stone 25 T/H Complex			7,047.48	8,981.88			6,797.48	8,731.88
BO-142F	Weigh Bridge	Shanghai Henqui			558.59	692.99			322.59	456.99

ANNEX -1

**SPECIFICATIONS RELATED TO THE HSR ITEMS
HSR-2021**

1. EARTHWORKS:**a) Embankment Construction- SSCM section 304:**Type I material MDD \geq 1600kg/m³Type II material MDD \geq 1500kg/m³HSR items : **EW1-011, EW1-014****b) Soil for road shoulders and gravel surfacing- SSCM section 409 & 601:**

Table 1708-1

Sieve size mm	Percentage passing
37.5	100
20	77 -100
5	41 -100
2.36	30 - 80
0.6	18 - 50
0.075	05 - 25

Table 1708-2 - Consistency limits for road shoulder materials and gravel surfacings.

Climatic Zone	LL	PI
Wet zone	<55	4 -25
Dry Zone	< 55	6 - 25

c) Sub Base :CBR \geq 20%LL \leq 40PI \leq 15HSR items : **EW1-001, EW1-013****2. Aggregates :****a) Single size aggregate bases - 50, 37.5, 19, & 12.5 mm - SSCM section 403 :**

Table 1701-4

Sieve Size mm	Percentage passing			
	Nominal size in mm			
	50	37.5	19	12.5
63	100	-	-	-
50	85 - 100	100	-	-
37.5	0 - 30	85 - 100	-	-
28	0 - 7	0 - 30	100	-
20	0 - 2	0 - 7	85 - 100	100
14	-	0 - 2	0 - 35	85 - 100
10	-	-	0 - 7	0 - 35
5	-	-	-	0 - 5
2.36	-	-	0 - 2	0 - 2

AIV \leq 30%FI \leq 35%HSR items : **M1-004, M1-007, M1-008, M1-009, A1-005 TO A1-012**

SPECIFICATIONS RELATED TO THE HSR ITEMS

HSR-2021

b) Water bound macadam and Dry bound macadam - SSCM section 404 :
(50 or 63 mm and crusher fines)

Table 1701-6

Sieve Size	Percentage passing		
	Nominal max size of agg in mm		Crusher fines
	63	50	
mm			
75	100	-	-
63	90 - 100	100.0	-
50	30 - 70	90 - 100	-
37.5	0 - 15	30 - 70	-
28	-	0 - 15	-
20	0 - 5	-	-
14	-	0 - 5	-
10	-	-	100.0
5	-	-	85 - 100
0.150	-	-	10 - 30

AIV <= 30%

FI <= 35%

HSR items : M1-010, M1-011

c) Penetration macadam base - SSCM section 406 :

Table 1701-7

Sieve Size	Percentage passing			
	Nominal size in mm			
	50	37.5	20	14
mm				
63	100	-	-	-
50	-	100	-	-
37.5	50-73	-	-	-
28	-	46-72	100	-
20	7-26	-	52-68	100
14	-	7-27	-	63-88
10	-	-	7-25	-
5	-	-	-	6-35
2.36	0-3	0-3	0-3	0-3
1.18	-	-	-	-

AIV <= 30%

FI <= 35%

HSR items : S1-037, S1-038

d) Dense Graded Aggregate Bases : SSCM section 405

(ABC construction)

Table 1701-5

Sieve Size	Percentage passing		
	Nominal size in mm		
	37.5	28	20
mm			
50	100	-	-
37.5	95-100	100	-
28	-	-	100
20	60-80	70-85	90-100
10	40-60	50-65	60-75
5	25-40	35-55	40-60
2.36	15-30	25-40	30-45
0.425	7-19	12-24	13-27
0.75	5-12	5-12	5-12

AIV <= 30%

FI <= 35%

CBR >=80%

HSR items : M1-012, M1-013

SPECIFICATIONS RELATED TO THE HSR ITEMS

HSR-2021

e) Aggregate grading, binder content and thickness requirements - SSCM section 407 :

Table 407-1

Mix Classification no.	1	2	3	4
Nominal maximum size of aggregate in mm	37.5	37.5	19	19
Course	Dense graded	Open graded	Dense graded	Open graded
Thickness mm - Max	100	100	50	40
- Min	60	60	30	30
Sieve size mm	Total % by weight passing			
50	100	100	-	-
37.5	95 -100	95 -100	-	-
28	80-95	53-75	100	100
20	-	-	80-98	96-100
14.0	62-77	10-27	-	50-75
10.0	-	-	49-67	22-42
5.00	-	-	29-44	-
2.36	30 - 45	0 - 10	18-30	5 - 20
1.180	-	-	13-24	0-2
300	-	-	5-14	-
Percent binder content by total weight of mix	3.0 - 4.0	2.5 - 3.5	3.5-4.5	3.0 - 4.0

AIV <= 30%

FI <= 35%

HSR items : **B0-362, S1-032**3 **Surfacing :**a) **Asphalt concrete - SSCM section 506 :**

Table 506-1

Mix Classification No. Course	Binder Course	Wearing Course Type - 1	Wearing Course Type - 2
Thickness mm - Max	75	75	75
Min	35	35	35
Sieve size mm	Total % by weight passing including filler if used		
28	100	100	-
20	90-100	85-100	100
14.00	-	-	82-92
10.0	56-82	66-94	61-81
5.00	36-58	46-74	41-66
2.36	21-38	35-58	27-48
1.18	15-32	26-48	20-40
0.600	10-26	18 - 38	15-35
0.300	6-20	11-28	10-25
0.150	3-13	07-20	7-17
0.075	1-7	3-12	5-9
Percent binder content by total weight of mix	3.5 - 4.5	4.0-6.5	4.0-6.0

AIV <= 30%

FI <= 35%

LAAV <= 40%

HSR items : **B0-361, S1-031, B0-362A**

SPECIFICATIONS RELATED TO THE HSR ITEMS

HSR-2021

b) Seal Coat treatments (Surface dressing) - SSCM section 505 :

Table 1701-8

Sieve Size mm	Percentage passing Nominal size in mm			
	19	12.5	9.5	6.3
25	100	-	-	-
19	85 - 100	100	-	-
12.5	0 - 25	85 - 100	100	-
9.5	0 - 7	0 - 25	85 - 100	100
6.3	-	-	0 - 25	85 - 100
4.75	-	0 - 7	0 - 10	-
2.36	0 - 2	0 - 2	0 - 2	0 - 10
0.075	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5

AIV <= 30%

FI <= 35%

LAAV <= 40%

HSR items : S1-003, S1-004, S1-005, S1-006, S1-029, S1-030

c) Cold mix surfacings - SSCM section 507 :

Table 507.1

Grading type Nominal max size of aggregate	Dense graded		Open graded	
	19 mm	12.5 mm	19 mm	12.5 mm
Sieve size mm	Total percentage passing by weight			
25	100	-	100	-
19	90 - 100	100	90 - 100	100
12.5	-	90 - 100	60 - 80	85 - 100
9.5	56 - 80	-	-	-
4.75	35 - 65	44 - 74	18 - 35	35 - 50
2.36	23 - 49	28 - 56	-	15 - 30
0.300	05 - 20	05 - 22	-	-
0.075	0 - 05	0 - 08	0 - 03	0 - 03
Percent binder as % of wgt of Aggregate				
(a) Cutback Bitumen	4.5 - 5.5	5.0 - 6.0	4.5 - 5.0	4.5 - 5.0
(b) Emulsion	5.0 - 6.0	5.5 - 6.5	4.5 - 5.5	5.0 - 6.0

AIV <= 30%

FI <= 35%

LAAV < 40%

HSR items : B0-365, B0-366, S1-033, S1-033A

4. Binder for Surface applications

a) Prime coat - CSS-1 emulsion - SSCM section 1702.3 : shall conform to ASTM D2397-98

Cutback bitumen(20-45%) or MC-30, MC-70 or MC-250 or MC-800 : SSCM section 1702.2

HSR items : B0-352, S1-022, S1- 023, S1-024, S1-025

b) Sand seal - CRS-1 emulsion - SSCM section 1702.3 : HSR items : B0-353, S1-011, S1-012, S1-013,
Tack coat - shall conform to ASTM D2397-98 S1-014, S1-027, S1-035, S1-036

Cutback bitumen (8 - 12%) - SSCM section 1702.2

Bitumen 80 - 100 penetration grade bitumen - SSCM section 1702.1

c) Surface dressing - CRS-2 emulsion - SSCM section 1702.3

Residue on distillation minimum 65% shall conform to ASTM D2397-98

Viscosity min. 100 Saybolt furol seconds

HSR items : B0-354, S1-029, S1-030

Formula for Earth excavation using machinery for HSR-2021											
Dozer HP and Blade Dimensions received from DGM(mech)/RC&DC											
A. Excavation :		Unit		D4 - H		D4 - E		D7 - G		D8 -10	
i	Dozer type :			95		80		200		300	
	Horse power		HP	95		80		200		300	
	Hire charge for Dozer	Rs.	per Hour (wet)	4,770.05	4,770.05	4,770.05	4,770.05	8,536.92	8,536.92	12,024.88	12,024.88
ii Cutting Blade Details :											
	Length of Load(Blade length)	L	m	2.636	2.636	3.12	3.12	4.27	4.27	4.965	4.965
	Blade height	H	m	1.085	1.085	1	1	0.97	0.97	1.174	1.174
iii Assumptions :											
	Slope of cut *	S	ratio	2 :1							
	Width of Load	W=2XH	m	2.17	2.17	2	2	1.94	1.94	2.348	2.348
	Haul distance	D	m	30	60	30	60	30	60	30	60
	Average Forward speed		km/h	2.25	2.25	2.25	2.25	2.70	2.70	2.70	2.70
	Average time for forward push	=A	minutes	0.8	1.6	0.8	1.6	0.67	1.33	0.67	1.33
	Average Reverse speed		km/h	2.85	2.85	3.50	3.50	3.50	3.50	2.50	2.50
	Average time for return	=B	minutes	0.63	1.26	0.51	1.03	0.51	1.03	0.72	1.44
	Ave. time loading and changing Gears	=C	minutes per cycle	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
	Efficiency of Operater	E	%	75	75	75	75	75	75	75	75
	Break for rest in each hour	R	minutes	10	10	10	10	10	10	10	10
	Average cycle time for Pushing,										
	Returning, Changing gears etc.	T=(A+B+C)	minutes	1.78	3.21	1.66	2.98	1.53	2.71	1.74	3.12
	Bulking factor	B	%	15	15	15	15	15	15	15	15
iv Moldboard capacity :											
	Volume(Bank) of Cut (LxHxW)/S		cu.m(bank)	3.10	3.10	3.12	3.12	4.02	4.02	6.84	6.84
v	Net loose volume per cycle	V	cu.m(loose)	3.57	3.57	3.59	3.59	4.62	4.62	7.87	7.87
	Probable cycle output per hour										
	Cycle output per Hour C=((60-R)/T)xE/100		cycles/Hr	21.07	11.68	22.59	12.58	24.51	13.84	21.55	12.02
vi	Net loose volume per hour	v=CxV	cu.m(bulked)	75.22	41.7	81.1	45.16	113.24	63.94	169.6	94.6
	Net loose volume per day (5 hours)			376.1	208.5	405.5	225.8	566.2	319.7	848	473
	Considering the time for Servicing, Fuelling & Cleaning as		hours/day	1	1	1	1	1	1	1	1
	Working time	t	hours/day	6	6	6	6	6	6	6	6
	Output per 6 Hours	=txV	cu.m per day	451.32	250.2	486.6	270.96	679.44	383.64	1017.6	567.6
vii	Average cost per Cu.m Loose		Rs.	63.41	114.39	58.82	105.63	75.39	133.51	70.90	127.11
Average for each dozer				88.90		82.22		104.45		99.01	
B. Loading :											
i	Hire Charge for wheel loader 2.7 cu.m		hour(wet)	5,098.14		B0-124					
	One way haul distance up to :	d	m	10							
	The Maximum time for loading cycle	t	minutes	1.2							
	Capacity of loader bucket	v	cu.m	2.7							
	Assume working time per hour	T	minutes	50							
	Assume loading bucket efficiency	E		0.8							
	Assume machine operator efficiency	e		0.75							
ii	No of loads per hour	n		41.66667		[(T/t)					
iii	Loading capacity per hour	V	cu.m	67.5		[v x n x e x E]					
	Assume 5 hours working for loader due to Queuing and delays in transport vehicles		hours	5							
iv	Out put per day (Loose)		cu.m	337.5							
v	Cost of loading per Cu.m (Loose)		Rs.	75.53		per cu.m					
Sub Total cost of excavation & loading				164.43		157.75		179.98		174.54	
C. For excavation of Base, Sub Base & Shoulder materials :											
	Allow for borrow pit establishment and site maintenance %		25								
D. For excavation of Embankment fill materials :											
	Allow for borrow pit establishment and site maintenance %		10								
Total cost of excavation and supply of Soil for											
	Sub Bases, Bases and Shoulders	Cu.m(loose)		205.54		197.19		224.97		218.17	
	Embankment fill material	Cu.m(loose)		180.87		173.52		197.98		191.99	
	Sub Bases, Bases and Shoulders, Average Embankment fill material, Average	total cost		211.47	per cu.m	Excluding overheads					
		total cost		186.09	per cu.m	Excluding overheads					
	Say, For Bases, Sub Bases and Shoulders	Rate Rs.		211.50	per cu.m	598.45	per cube	B0-201			
	Say, For Embankment filling	Rate Rs.		186.10	per cu.m	526.64	per cube	B0-202			
		with 28%		270.72	per cu.m	766.14	per cube				
				238.21	per cu.m	674.13	per cube				

Cu.m Transport cost on KM distance involving small quantities

Cost of Transport from 0.5 km up to 1 km pe (T1-003)	275.70
Rate for each subsequent km from 1 km up to 8th km (T1-003A)	42.90
Rate for each subsequent km beyond 8th km (T1-003B)	28.80

Distance/km	Cost/Cu.m/Trip Rs.	Distance/km	Cost/Cu.m/Trip Rs.
0.5 up to 1	275.70	43	1,584.00
2	318.60	44	1,612.80
3	361.50	45	1,641.60
4	404.40	46	1,670.40
5	447.30	47	1,699.20
6	490.20	48	1,728.00
7	533.10	49	1,756.80
8	576.00	50	1,785.60
9	604.80	51	1,814.40
10	633.60	52	1,843.20
11	662.40	54	1,900.80
12	691.20	56	1,958.40
13	720.00	58	2,016.00
14	748.80	60	2,073.60
15	777.60	62	2,131.20
16	806.40	64	2,188.80
17	835.20	66	2,246.40
18	864.00	68	2,304.00
19	892.80	70	2,361.60
20	921.60	72	2,419.20
21	950.40	74	2,476.80
22	979.20	76	2,534.40
23	1,008.00	78	2,592.00
24	1,036.80	80	2,649.60
25	1,065.60	82	2,707.20
26	1,094.40	84	2,764.80
27	1,123.20	86	2,822.40
28	1,152.00	88	2,880.00
29	1,180.80	90	2,937.60
30	1,209.60	92	2,995.20
31	1,238.40	94	3,052.80
32	1,267.20	96	3,110.40
33	1,296.00	98	3,168.00
34	1,324.80	100	3,225.60
35	1,353.60	102	3,283.20
36	1,382.40		
37	1,411.20		
38	1,440.00		
39	1,468.80		
40	1,497.60		
41	1,526.40		
42	1,555.20		

Daily Labour Rates for year 2021 HSR

		Basic Salary	Cost Of Living Allowance	RDA Allowances	Extra Work Allowance 15%	Matching Allowance	Sub Total	12% EPF Rs	3% ETF Rs.	Total /Day Rs.	Rate for 2021
1	UnSkilled Labour	825.00	260.00	104.76	56.86	81.50	1,328.12	159.37	39.84	1,527.34	1,527.34
2	Semi Skilled Labour	858.33	260.00	104.76	62.41	91.00	1,376.50	165.18	41.30	1,582.98	1,600.00
3	Skilled Labour "B"	876.33	260.00	104.76	66.54	98.00	1,405.63	168.68	42.17	1,616.47	1,700.00
4	Skilled Labour "A"	912.33	260.00	104.76	74.41	112.00	1,463.50	175.62	43.91	1,683.03	1,900.00

ANNEX - V

Transport and Paving of Interlocking Blocks - 2021

DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT(Rs.)
1. Transport of Interlocking Concrete Paving				
Block per km transport (short distance - within the province)				
Data for: transport distance of	25.00	km for	2,750.00	Blocks
Dimension of a Block (220x110x80 mm)				
Volume of 2750 blocks	5.32	Cu.m		
Average weight of a interlocking block	4.65	kg		
Load per trip	12,778	kg		
Hire charge (Wet) for a 12 ton Lorry per km (HSR-2021 Annex 1 Table 2)		Rs./Km	109.99	
Hire charge (Dry) for a 12 ton Lorry per hr. (HSR-2021 Annex 1 Table 2)		Rs./km	73.38	
Average Speed of Lorry 20 km/Hr (Assumption)	20.00	km/hr		
Distance Transport 2 way	50	km		
Cost of transport by lorry	50	km	109.99	5,499.42
Cost of Lorry during Loading and Unloading @ total 2 Hrs(Idle Time)	2.00	Hrs	1,467.61	2,935.22
Labour for loading & Unloading(4 U/Sk for 1.0 hrs)	0.50	Day	1,900.00	950.00
Total cost for transport 2750 blocks for 25 km Distance				9,384.64
Transport cost per block per 1 km				0.14
			Say	0.14 per Block/ km
2. Paving of Interlocking Concrete Blocks.				
inclusive 50 mm sand bedding and compaction. Supply and transport of Blocks and bedding material to be paid separately.				
(Depending on the design, Construction of side kerbs and ABC layer and sub grade preparation to be paid separately.)				
a) Cutting end Blocks				
Cost of angle grinder			20,000.00	
	2500	Hours		
Cost of cutting blade			1,200.00	
Assumed workable life period	96	Hours		
Hire Charge of Electric Generator per Hour		Hour	912.25	
Charge for Angle grinder per hour			8.00	
Cost of cutting Blade per Hour			12.50	
Data for paving per day	93	Sq.m		
Angle grinder	2	hours	8.00	16.00
Cutting Blade	2	hours	12.50	25.00
Electricity Generator (HSR - 2021)	2	hours	912.25	1,824.49
Labour Sk'A' (HSR - 2021)	1	Day	2,400.00	2,400.00
Total Cost for cutting concrete blocks Blocks for 93 sq.m				4,265.49
Sub Total Cost per 1 Sq.m				45.87 per Sq.m
b) Paving of concrete blocks and preparation of sand bedding				
Data for	93	Sq.m		
Paving width confined between kerbs	3	m		
Paving output area per day	93	Sq.m		
Sand (including 16 km transport)	4.65	Cu.m		
Add 10% for bulking and filling etc.	0.47	Cu.m		
Labour for spreading sand and paving				
Skilled "A"	1	Day	2,400.00	2,400.00
Skilled"B"	1	Day	2,100.00	2,100.00
Un Skilled	4	Day	1,900.00	7,600.00
Plate vibrator	1	Day	3,680.62	3,680.62
For Other Tools(Assume 2.5% of Labour)				302.50
Total Cost for paving blocks for 93 sq.m				16,083.12
Sub Total Cost per 1 Sq.m sand bedding and paving of blocks				172.94 per Sq.m
Total cost of paving of interlocking blocks excluding the cost of side kerbs				
			Say	218.80
				218.75 per Sq.m